Public Health
Seattle & King County

MEETING MATERIALS

Safety Net Providers Meeting, February 11, 2008

Background Information on:

Access to Health Care in King County for the Uninsured, Underinsured and Medicaid Populations:

- *Who and where are the uninsured, underinsured, and Medicaid-covered populations in King County?*
- *What do we know about where they access health care services now?*
- *What do we know about who is not accessing care and why?*
- *What do we know about access for specific populations?*

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Executive Summary

This paper describes how King County residents get—or do not get—the health care they need. The main topics addressed in the report include primary medical care and dental care for King County adults who are uninsured, underinsured and Medicaid beneficiaries. Acknowledging the thin boundary between physical health and mental health, basic descriptions of mental health and chemical dependency treatment needs and services are included.

The paper focuses on those who face the greatest financial and other barriers to health care: the uninsured, the underinsured, and Medicaid beneficiaries. These groups were chosen out of a concern for equity. Residents who lack insurance are more likely to forego needed preventive health care, such as cancer screening and cholesterol checks, due to out-of-pocket costs. When individuals are unable to get the care they need, there are negative consequences for their health and for the communities in which they live.

We highlight what we know based on the data and research literature available and suggest areas of further inquiry. We hope these findings will assist policy makers and providers in the health care safety net as they design solutions for a critical system under severe stress.

Greatest Inequities in Health Insurance Coverage (BRFSS[1]): The "Working Poor," Communities of Color and South King County Residents

About one in eight adult King County residents has no health insurance (13% or 157,000 adults). Inequities in the burden of lack of insurance are persistent or slowly increasing.

- Over four in 10 (43%) near-poor[2] residents lack health insurance, the highest rate of all income groups. Almost four in 10 (38%) of the poor[3] lack insurance. Yet only 4% in the highest income group[4] lack insurance. These disparities have been slowly getting larger.
- Almost one in every two (47%) of the working poor lack insurance.[5]
- Over four in 10 (45%) Latinos lack health insurance. Alarmingly, seven in 10 (71%) people who primarily speak Spanish lack insurance.
- About one in four American Indian/Alaska Natives (29%) and African Americans (25%) lack insurance—over twice the rate in whites (11%), the group with the lowest rate. Disparities between African Americans and whites have increased dramatically in the last 10 years.

[1] Two local surveys differ on their estimates of number of uninsured adults in King County. Neither survey is comprehensive—one or the other of them lacks data on children, race, sub-county area or other health conditions. This paper uses figures from whichever survey is the best fit for the demographics of the analysis. In general, the Behavioral Risk Factor Surveillance System (BRFSS) estimates a higher number of uninsured than does the Washington State Population Survey (SPS), although both show disparities. We cite which survey we used.
[2] Near-poor is defined as having an annual household income of between $15,000 and $25,000.
[3] Poor is defined as having an annual household income of less than $15,000.
[4] Highest income group is an annual household income of $50,000 or more.
[5] Working poor is defined as being employed and having an annual household income of less than $25,000.

- Residents of South County are most likely to lack insurance (Tukwila/SeaTac, 27%; Burien/Des Moines, 23%; White Center/Boulevard Park, 20%).

In addition to those who are uninsured, another 120,000 (10%) King County adults are considered to be underinsured, meaning they have insurance but it does not provide adequate financial protection.

Almost one in five (18%) King County residents of all ages had Medicaid coverage for at least some types of health services in 2005, representing 316,464 individuals of all ages. Medicaid targets some of the county's most vulnerable populations, such as low-income pregnant women, children, and adults with physical and/or mental disabilities.

Overall, out of about 140,000 King County uninsured residents (SPS), around one-third (about 50,000) receive primary care services at core safety net health centers.

Low-income residents in King County access health care through many different health systems and clinics. One major source of care we have termed "core health safety net providers," referring to those that have a mission to serve patients regardless of their health insurance status. Many of these providers receive federal, state, and local financial assistance to help pay for care for the uninsured and those on limited public coverage.

The analysis in this paper shows that access to core safety net providers for the uninsured in vulnerable populations is mixed. Safety net providers—who reach out to people of color and those living at or near poverty—are seeing these efforts pay off in better coverage in these groups. Yet substantial numbers of the vulnerable uninsured are still outside the system, including the near-poor, residents of South Region and people of color.

Dental care: unmet needs pervasive

There is an even greater discrepancy between the number of people in the county who do not have dental insurance, about 382,000, and the number of uninsured adult dental patients being treated in safety net dental clinics, about 23,000 (6%). An indication of the high level of unmet dental need in the uninsured is the high frequency of dental emergencies among those without health insurance. Whereas cardiac events, respiratory infections and injuries are the most common reasons for an emergency room visit among insured residents; three of the top ten diagnoses for the uninsured included emergency dental conditions.

Substantial unmet need for mental health care and chemical dependency services

Similarly, there is a significant difference between the number of low-income King County residents who need mental health services and those who receive these services. An estimated 65,000 low-income residents are in need of publicly funded mental health services for a serious mental illness, yet only about 28,000 (43%) low-income county residents with Medicaid receive on-going outpatient mental services while only about 500 low-income people without Medicaid receive outpatient mental services.

Low-income King County residents without Medicaid face similar access barriers for chemical dependency treatment. Of 18,000 low-income persons identified as needing treatment by the

2006 Washington State Department of Alcohol and Substance Abuse survey of King County households, only 24% (5,840) are being served.

A health care safety net under stress

In summary, there are substantial health care needs among low-income and uninsured King County residents that are not being met by the core safety net in the areas of primary care and dental care. Some special populations—such as those with communicable diseases, those with chronic conditions, low-income women, those experiencing homelessness, refugees and Veterans—have additional health care needs and often face particular challenges obtaining this care. The core health care safety net providers provide primary care to about 148,000 patients per year, 38% of whom are uninsured. The dental safety net providers treat about 65,000 patients per year, with a similar percentage uninsured (36%). Both types of providers face costs that are rising faster than their revenues. The burden of chronic diseases is significant now and is likely to rise in the future, resulting in continuing high levels of unmet needs and inequities in health problems and in access to treatment. The current fragmented and financially strained health care safety net delivery system in the county is not adequate to assure that health care services are equitably and systematically matched to those in need.

1. Purpose and Scope of this Assessment

A. Public Health Operational Master Plan

King County is currently in the process of implementing a Public Health Operational Master Plan (PHOMP). This Plan describes the three primary functions of Public Health–Seattle & King County as promotion, protection, and provision, and sets priorities for the next four years. Public Health–Seattle & King County will pursue these priorities through assessment, policy development, and assurance activities.

In addition, the Plan provides guidance on the principles that should underlie King County's public health functions, including efforts to expand access to health care for those who are uninsured or underinsured. The guiding principles affirm that the system should be centered on the community, driven by social justice, based in science and evidence, and focused on prevention.

The PHOMP was approved by both the King County Board of Health and the King County Council. The four-year assessment strategy for Provision states the department will "develop the core data sets to obtain and disseminate accurate and credible basic information regarding access to, and quality of, health care in King County."

This initial assessment report is a description of our current understanding – using available data – of the status of health care access in King County for the safety net population, primarily focusing on adults from 18 to 64, who are the most likely to be ineligible for publicly funded health coverage. For purposes of this assessment report, we are including the uninsured, underinsured, and Medicaid-covered populations in the category of safety net populations. Although there are many issues related to the quality of and access to care for this population, this initial report focuses on four key questions:

1. Who and where are the uninsured, underinsured and Medicaid populations in King County?
2. What do we know about how and where they now access primary care, dental care and preventive services?
3. What do we know about who is not accessing primary care and dental care and why?
4. What do we know about health care access for specific populations in King County?

B. Data Sources

As part of the development of the PHOMP, an expert panel was convened in 2006-07 to review and make recommendations concerning access to insurance and health care services for King County residents. A key finding of the expert panel was that there are significant gaps in information regarding who does and does not have access to quality, affordable health care. There are significant gaps in our understanding of the specific barriers to care as well as quality gaps in the care delivered. Although in an ideal world there would exist a single source of

population-based data for various aspects of this analysis, in reality this assessment relies on data from numerous sources.

The available data comes from several sources, including Behavioral Risk Factor Surveillance Survey, State Population Survey, State Medicaid data, and operational data from core safety net providers for both primary medical and dental care, among other sources. Taken as a whole, the data begins to convey a picture of the current state.

Note Regarding Data on those without Health Insurance

Two local surveys provide estimates of the uninsured in King County: the Washington State Behavioral Risk Factor Surveillance System (BRFSS) and the Washington State Population Survey (SPS). The surveys are administered during different time periods and to different age groups, they have different weighting methodology, they ask different questions to assign respondents as insured or uninsured, and only the BRFSS provides regional data below the county level. In general, the SPS asks more detailed questions on insurance coverage, but is fielded only every other year. The BRFSS is given every year and offers larger sample sizes which make it possible to more accurately carry out sub-analyses, such as insurance status by health status. A detailed comparison of the two surveys is under development by PHSKC staff.

In general, the BRFSS shows more uninsured than the SPS. For instance, both surveys include respondents aged 18 to 64. For 2006, SPS estimates 9% uninsured (about 126,000 adults) and the BRFSS estimates 13% uninsured (about 157,000 adults). For this report, we used the BRFSS data for trends, sub-county estimates and to examine insurance coverage disparities; and we used the SPS data for children, all ages and poverty analyses. Because the results of the two surveys are not consistent, figures on insurance coverage in this report may also appear to be internally inconsistent. Throughout the paper, we cited which source was used. We will continue to work with the state BRFSS and SPS staff to better understand and reconcile these differences.

C. Purpose of the Report

Public Health intends for this assessment report to serve at least two main purposes: first, to clarify what is happening in general with this population's access to health services, and second, to understand what we can about both who is and who is not accessing care. From this analysis, it is hoped that further questions will be generated from which we can both build more information and begin to develop ideas and plans for ways to improve access to health services in King County.

The key audiences for this report are policy makers, including members of the King County Board of Health, the King County Council and other elected officials and boards; health system providers, including the core safety net set of providers; and health system researchers and innovators, including the Puget Sound Health Alliance and the King County Health Action Plan, among others.

This report is a work in progress. As it undergoes review and revision by local health system experts and stakeholders, Public Health intends to revise and strengthen the document.

Comments on the report will inform the department's role in providing useful assessment data today and into the future.

The current version of this report has six chapters. "*Chapter 2. Health Care Coverage of King County Residents*" presents an overview of the current options for health care coverage of King County residents. Who and how many in our region lack health care coverage of any kind? Who is underinsured? Who/how many are on Medicaid and other publicly sponsored programs for low-income?

"*Chapter 3. The Core Health Safety Net System in King County*" presents utilization information for a core group of health care providers in King County whose primary mission is to provide access to primary medical care for low-income people who are uninsured or underinsured, or who have public coverage such as Medicaid. This chapter reviews how many such safety net providers are in King County and who they serve. The extent to which this safety net is providing access to the County's uninsured population is analyzed, including estimates of the uninsured who are not accessing care through this system.

"*Chapter 4. The Dental Care Safety Net in King County*" presents information on who and how many low-income people use the dental care safety net services, and the extent of unmet need in this particularly challenging area.

"*Chapter 5. Other Sources of Care for the Uninsured, Underinsured, and Those on Medicaid*" briefly describes additional organizations in the region that provide health care to low-income residents. Some of these entities provide care to people who are uninsured, although Public Health does not have access on the numbers and characteristics of those served.

"*Chapter 6. Population Health Needs: Services Provided and Gaps*" presents limited information on the needs of and services available in King County for people with certain health conditions and people falling into certain population subgroups. We highlight what we know about their numbers, their access to care, and major gaps. They are included because they often have specific health care needs or face particular barriers to care. Services for these groups intersect with our core safety net providers and other care providers in a myriad of partnerships.

D. Next Steps

The public health department will use this report as a background document when convening safety net providers and other decision-makers in February 2008. The assembly of these data is an early step in developing a shared understanding of the health and financing problems that face the county and the shared development of strategies to address these problems. The data are presented with the hope that they will inform an insightful dialogue and decision-making process about how the needs of King County residents can best be met by the health care professionals and volunteers who live and work here.

Important areas of study that require further analysis include access to specialty care, quality of care, health equity and the underlying contributors to health. Monitoring and improving access

to specialty care as recommended in July 2007 by the Pacific Hospital Preservation and Development Authority will help expand access to specialty care for the uninsured. Assessing the quality of care delivered to the uninsured, underinsured and those with Medicaid or other publically funded coverage is another vital next step. While the quality of care provided to those with Medicaid has received considerable study, less attention has been given to the quality of care received by the uninsured and underinsured. In addition, assuring that the distribution of health services is equitable across the population is necessary to address health disparities now experienced in the county. Other important contributors to physical and mental health such as environmental, financial, housing, educational, and transportation factors will need to be addressed in the future, as well, if substantial gains are to be made in improving the public's health over time.

2. Health Care Coverage of King County Residents

Definition of terms used in this section:

Poor: having an annual household income of less than $15,000 per year.

Working poor: being employed and having an annual household income of less than $25,000.

Near-poor: having an annual household income of between $25,000 and $35,000.

Highest income group: having an annual household income of $50,000 or more.

Inequity: the absolute difference in rates between two identified groups.

Underinsured: those who are insured but without adequate financial protection.[6]

A. The Uninsured

The uninsured experience a greater burden of illness and earlier deaths compared to those with insurance.[7] One new study concludes that the uninsured near elderly are in worse health than their insured counterparts and their health conditions improve once they obtain Medicare coverage at age 65.[8] A second recent study reports that people who are uninsured are less likely to get screened for cancer, more likely to be diagnosed with an advanced stage of cancer and less likely to survive that diagnosis compared to the insured.[9]

King County survey data confirm findings from the literature showing that lacking health insurance is associated with significantly lower use of preventive services. The chart below shows the percent of King County adults, by insurance status, who have received the following preventive care services: cholesterol screening, breast and cervical cancer screening, colorectal cancer screening, tobacco cessation counseling, and HIV testing.

Insurance coverage affects delivery of all preventive service, except HIV testing. Most differences are statistically significant. The largest differences are in colorectal cancer screening,

[6] (1) Medical expenses amounted to 10% of income or more; (2) among low-income adults (below 200 percent of the federal poverty level), medical expenses amounted to at least 5% of income; or (3) health plan deductibles equaled or exceeded 5% of income. See Schoen et al (2005): *Health Affairs*, June 14, 2005. Data for King County were estimated from national survey, method available on request.

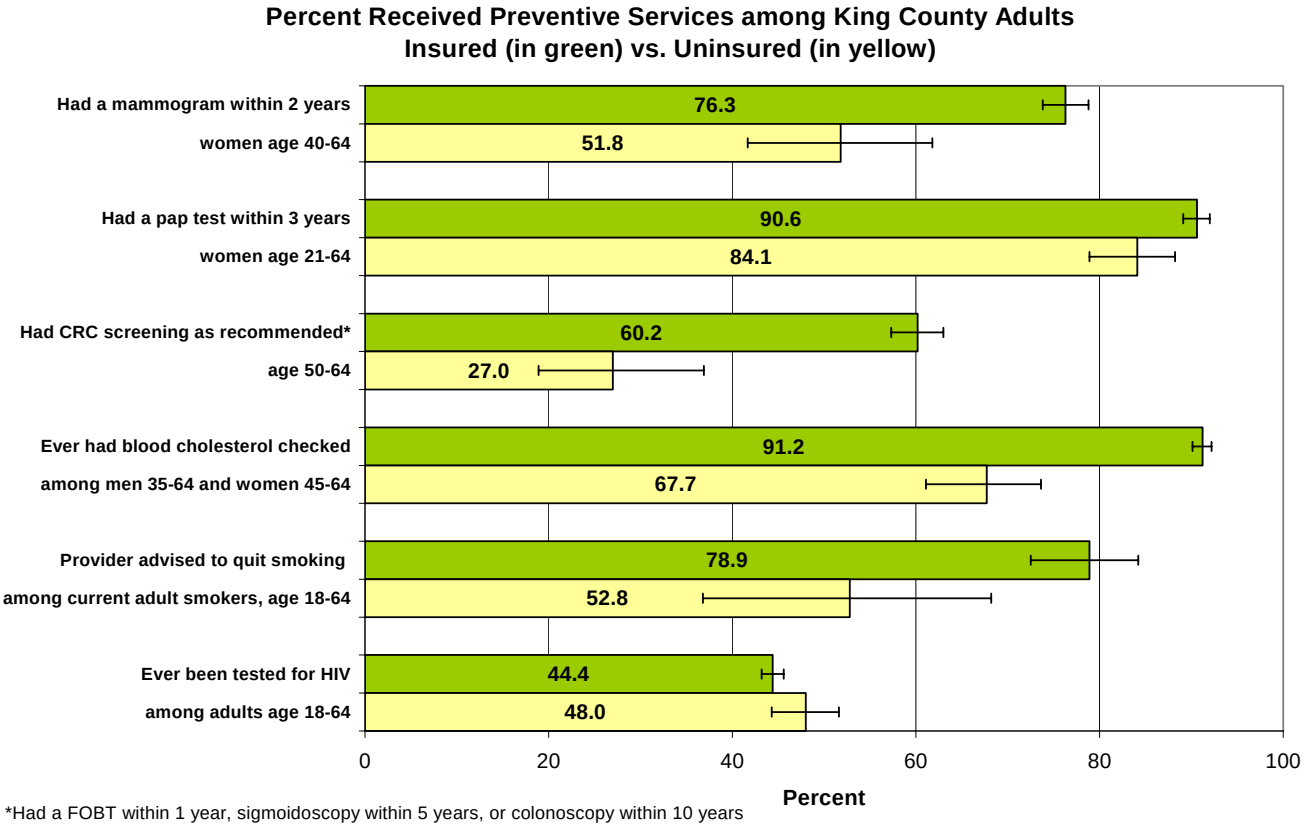
[7] Institute of Medicine. (2002). *Care Without Coverage: Too Little, Too Late.* Washington, DC: National Academy Press and Stan Dorn, "Uninsured and Dying Because of It: Updating the Institute of Medicine Analysis on the Impact of Uninsurance on Mortality" Urban Institute, January 2008.

[8] J. Michael McWilliams, MD; Ellen Meara, PhD; Alan M. Zaslavsky, PhD; John Z. Ayanian, MD, MPP, "Health of Previously Uninsured Adults After Acquiring Medicare Coverage" *JAMA.* 2007;298(24):2886-2894.

[9] Elizabeth Ward, PhD, Michael Halpern, MD, PhD, Nicole Schrag, MSPH, Vilma Cokkinides, PhD, MSPH, Carol DeSantis, MPH, Priti Bandi, MS, Rebecca Siegel, MPH, Andrew Stewart, MA and Ahmedin Jemal, DVM, PhD. "Association of Insurance with Cancer Care Utilization and Outcomes" CA Cancer J Clin 2008.

tobacco cessation counseling and mammography. The age group in each indicator is limited to those who are eligible for recommended screenings. Those aged 65 and older—virtually all of whom are insured—are eliminated from comparisons.

For additional information about using preventive services as a Public Health performance measure, see the King County AIMs High project website.[10]



*Had a FOBT within 1 year, sigmoidoscopy within 5 years, or colonoscopy within 10 years

One in eight adults is uninsured

- Today, about 157,000 adults in King County are uninsured, 13% of the adult population.
- Overall, lack of health insurance among King County adults has fluctuated over the last 10 years. In 2006, the rate of uninsured was about the same as in 1997. In 2004, it peaked at 15% for people aged 18 to 64. The rate of uninsured decreased slightly from 2004 to 2006.
- However, lack of insurance has increased in some groups. Lack of insurance for African Americans, people aged 45 to 64, and people in some low- and middle-income categories has increased in the last decade.
- More recently—in the last five years—South King County region residents also experienced an increase in uninsured.

[10] King County AIMs High, http://www.metrokc.gov/aimshigh/search2.asp?HEHealthProm, accessed Jan 29, 2008.

Inequity is substantial and persistent or increasing: data on income, employment, race/ethnicity, age, gender, immigrant status

- Over four in 10 (43%) near-poor residents lack health insurance, the highest rate of all income groups. Almost four in 10 (38%) of the poor lack insurance. Yet only 4% in the highest income group lack insurance. These disparities have been slowly getting larger.
- Almost one in every two (47%) of the working poor lack insurance.
- Over four in 10 (45%) Latinos lack health insurance. Alarmingly, seven in 10 (71%) people who primarily speak Spanish lack insurance.
- About one in four American Indian/Alaska Natives (29%) and African Americans (25%) lack insurance—over twice the rate in whites (11%), the group with the lowest rate. Disparities between African Americans and whites have increased dramatically in the last 10 years.
- Young adults 18 to 24 are mostly likely of all age groups to lack insurance (28%). Three percent of children lack insurance.
- Lack of insurance in immigrant children (9%) is about three times that of U.S.-born children (3%).
- Rates are slightly higher among men (16%) compared to women (12%).

Neighborhood (Health Planning Area)

Insurance status information is available by King County's 34 Health Planning Areas (see map, Appendix A).

- Residents of South County are most likely to lack insurance (Tukwila/SeaTac, 27%; Burien/Des Moines, 23%; White Center/Boulevard Park, 20%).
- Generally, eastern King County residents are least likely to lack insurance (Issaquah/Sammamish, 5%; Mercer Island/Point Cities 6%; Cascade & Covington, 7%).

See also Appendix B for a profile of uninsured residents in King County.

King County Community Health Indicators: *More information about access to care, the uninsured, and health outcomes are available on the King County Community Health Indicators website:* ***http://www.metrokc.gov/health/CHI/.*** *The website was developed to provide a broad array of comprehensive, population-based data to community-based organizations, community clinics, public agencies, policymakers and the general public in an accessible format.*

B. The Underinsured

The term "underinsured" refers to those who have health insurance but who are not financially protected from substantial health care costs (see footnote at the beginning of this chapter for

more definition detail). Local data on underinsurance does not exist. We estimated the number and percent of King County residents who are underinsured from a 2003 national survey.[11] We adjusted this estimate based on what we know about local insurance coverage, poverty status, age, and health status. Although we used the best available data, these figures should be treated as estimates only.

- In addition to 13% uninsured, another one of ten (10%) King County residents aged 18 to 64—about 120,000—is underinsured.
- More than half (65,000) of the underinsured live below 200% of the federal poverty level. Those living below 200% of the poverty level are six times more likely to be underinsured than those living at 200% and above.
- People who are ill—those with fair or poor health status—are over twice as likely to be underinsured as healthy people.

C. Dental Insurance Coverage

In general, King County residents are much more likely to lack dental insurance than medical insurance. The latest survey data for dental insurance is from 2001.

- In 2001, over one in four (27%) adults, or about 382,000 adults, lacked dental insurance.
- In stark contrast to the pattern for medical insurance, those 65 and older were most likely to lack dental insurance—over six in 10 (63%). One fourth of seniors have severe gum disease which is linked with heart disease, stroke and diabetes.[12] People 65 and older are not covered for dental care under Medicare, unless they get dental coverage through a Medigap policy, managed care package or Medicaid.
- There is no countywide survey data on the percent of children who lack dental coverage.
- Almost six in 10 (59%) of the near-poor lacked dental insurance, compared to less than two in 10 (15%) of those in the highest income bracket.

We also looked at local data on whether adults have seen a dentist in the last year.

- Twenty-three percent, or about 327,000 King County adults have not seen a dentist in the last year.
- Almost one in four people 65 and older (24%) did not see a dentist in the last year.
- Disparities are similar to those related to lack of medical insurance. Latinos have particularly high rates (40%) without a dental visit. In addition, almost half (45%) of the near poor have not seen a dentist in the last year.

[11] Schoen C, Doty M, Collins S et al (2005): "Insured by not protected: How many adults are underinsured?", *Health Affair Data Watch web exclusives,* June 14, 2005. Available at http://content.healthaffairs.org/cgi/content/abstract/hlthaff.w5.289, last accessed Jan. 13, 2008.
[12] Washington Dental Service Foundation, Senior's Oral Health Initiative. Accessed Jan. 24, 2008 at www.deltadentalwa.com/WDSFoundation/WDSFoundation.aspx?DView=WDSFoundation_SeniorsOralHealth.

In 2006, 83,376 King County residents with Medicaid received dental services.[13] The average total dental cost per beneficiary for the year was $245. Many dentists in Washington will no longer accept Medicaid patients, as Medicaid offers only around 30% of the reimbursement for most services as does private insurance. Payments for Medicaid children's dental services increased in 2008 in an effort to improve access.

D. Medicaid Coverage

Medicaid is the largest source of funding for medical services for King County residents with limited income. Financed and operated jointly by the states and federal government, Medicaid accounts for roughly one sixth of the nation's health care spending.[14]

In State fiscal year 2006, 17% of the King County population used one or more Medicaid services at some time during that year (315,767 individuals out of a population of 1,808,300), accounting for Medicaid spending of $706,400,000. The number of King County residents receiving services and the total costs by type of service are shown below. Note that many beneficiaries receive more than one type of service and that the table indicates whether a beneficiary used the service at any point during the year, so there is some duplication.[15]

Type of Service	**Number of beneficiaries**	**Costs in State Fiscal Year 2006**
Managed Health Care	162,418	$203,602,240
Fee-for-service categories:		
Physician Services	93,243	$50,190,801
Hospital Inpatient	13,509	$139,340,803
Hospital Outpatient	60,034	$57,547,805
Prescription Drugs	103,731	$138,359,361
Other Medical Services	159,337	$96,969,069
Dental Services	83,376	$20,388,017
Total Medically Eligible for Federal Title XIX	298,818	
Total Medically Eligible for State Funded Programs	24,801	(25% children, 75% adult)
In addition to Medicaid:		
Mental Health Services:		
Mental Health Community Services	32,038	$95,635,365
Community Inpatient Services	2,296	$17,024,102
Chemical Dependency Treatment:		
Alcohol and Substance Abuse Assessments	5,785	$1,089,651

[13] DSHS Client Services, July 2005 - June 2006 (SFY2006) report, prepared March 2007, DSHS Research and Data Analysis Division website, www1.dshs.wa.gov/rda/research/clientdata/2006/default.shtm, accessed 12/13/07.
[14] Kaiser Commission on Medicaid and the Uninsured
[15] DSHS Client Services, July 2005 - June 2006 (SFY2006) report, prepared March 2007, DSHS Research and Data Analysis Division website, www1.dshs.wa.gov/rda/research/clientdata/2006/default.shtm, accessed 1/24/08.

Type of Service	Number of beneficiaries	Costs in State Fiscal Year 2006
Detoxification	2,378	$1,778,140
Opiate Substitution Treatment	1,960	$4,570,192
Chemical Dependency Outpatient Treatment	9,260	$4,587,864
Chemical Dependency Residential Treatment	2,489	$7,715,142

Managed Care Enrollment by Health Plan

Of those Medicaid beneficiaries in King County enrolled in managed care plans at the mid-point of SFY2006 (December 2005), 65% were enrolled in Molina Healthcare of Washington, 26% were enrolled in Community Health Plan, 5% in Basic HealthPlus, 2% in Group Health Cooperative and 2% in Community Health Plan General Assistance-Unemployable (GA-U).[16] More recent enrollment data from June 2007 shows a similar distribution by health plan, with percentages within one to two percentage points of the December 2005 levels.[17]

Medicaid Eligibility Groups

The primary categories of people who are eligible for Medicaid are pregnant women and infants, families with dependent children (including recipients of Temporary Aid to Needy Families or TANF), children meeting particular age and income requirements, and adults who have mental and/or physical disabilities (see Appendix C). In 2005, about 38% of King County births were to low-income, Medicaid-covered women.

In 2006, Washington state laid out a plan to cover all children in families earning up to 300% of the federal poverty level (FPL). In July 2007, all children in families earning up to 250% were eligible for publicly funded health coverage, and in January 2009, income eligibility rises to 300% FPL.

Washington state provides health care coverage for some additional groups not covered by federal Medicaid. For example, recipients of General Assistance programs are eligible for limited medical care coverage. The program was recently expanded to add limited mental health services on a pilot basis. Low-income, non-disabled and non-pregnant adults, in general however, are not eligible for Medicaid.

Access to Services for those with Medicaid

Usually Medicaid coverage is considered comprehensive and able to provide access to many medically necessary health services, but there are important exceptions for some populations. Even with presence of Medicaid coverage, though, access to health care and dental services may be difficult.[18] For example, only 31% of King County children under age six with Medicaid received any dental services in 2004.[19]

[16] DSHS, HRSA Managed Care Enrollment Report, May to December 2005.
[17] DSHS, HRSA Managed Care Enrollment Report, "HO SCHIP BHPlus Plan Enrollment by County 6/1/2007."
[18] Rosenbach, Margo, C. Irvin, R. Coulam. 1999. "Access for Low-income Children: Is Health Insurance Enough?" *Pediatrics* 103 (6): 1167-1175.
[19] Fiscal Year 2004 Medicaid Utilization Report.

Another example is the health coverage "cliff" before and after low-income women become pregnant. Women who are not pregnant must earn less than 45% of the federal poverty level (FPL) to qualify for Medicaid (about $5,774 per year for a family of two), while pregnant women may qualify if they earn less than 185% FPL (about $23,736 per year for a family of two). Women lose their full Medicaid coverage two months after the end of their pregnancy, and receive family planning-only coverage for the next ten months. They only qualify for full Medicaid when not pregnant if they earn less than 45% FPL. Additional maternity support services are available for these women with Medicaid when they are pregnant and shortly afterwards.

E. Mental Health and Chemical Dependency Services Coverage

Mental Health Services. Options for mental health coverage for King County's low-income residents are extremely limited. Low-income children and adults in King County may qualify for publicly funded mental health services if they meet certain statewide access to care standards. In general, only those persons diagnosed with serious mental and emotional disorders qualify for publicly funded services.

Eligible participants are enrolled in the mental health managed care plan called the Regional Support Network (RSN), which coordinates care through local community-based mental health agencies. Washington state contracts with King County Department of Community and Human Services to manage the King County RSN.

In 2006, the King County RSN provided mental health services to 35,079 county residents.[20] Of this group:

- 28,373 had Medicaid coverage for mental health care
- 6,706 were not on Medicaid

Only 492 of the 6,706 non-Medicaid clients received outpatient services, most were provided with crisis care only. By contrast, of those on Medicaid, most received outpatient services.

In a 2000 Washington state household survey, 15% of low-income respondents (those below 200% of the federal poverty level) reported that they had a serious mental disorder. Applying that 15% to King County's low-income population of 433,000 adults and children, it can be estimated that 65,000 residents are in need of publicly funded mental health services for a serious mental illness. As noted above, however, only about 28,000 low-income county residents currently have coverage for mental health services. This leaves a known gap of at least 37,000 low-income people with serious mental health disorders who may be in need of care.

It should be noted that this gap does not include the many additional low-income residents with minor disorders who could benefit from early intervention to address their emerging mental

[20] King County Department of Community and Human Services; Mental Health, Chemical Abuse and Dependency Services Division, "King County Regional Support Network 2006 Year End Report Card," pages 5 and 6, http://www.metrokc.gov/dchs/mhd/reports/mh/06yearend.htm, accessed 12/13/07.

health problems. That population, as well as those with serious mental illness whom the current system lacks capacity to serve, may increasingly be showing up in local community primary health centers and/or hospitals—without coverage—in attempts to access care, or going without needed care altogether until a crisis develops.

Through several recent state and local initiatives, access to care is being expanded in King County in a limited way for people who are not covered by Medicaid for mental health care. These include the addition of a mental health benefit for recipients of the state General Assistance-Unemployable program who have mental health needs; the expansion of mental health services in primary care clinics through the Veteran's & Human Services Levy; and the recent passage of a sales tax increase to fund mental health and chemical dependency services.

Chemical Abuse and Dependency Treatment Services. People eligible for publicly-funded drug and alcohol treatment services include persons who are indigent and/or low-income, have few resources, and are abusing alcohol or other drugs. Adult patients must meet the diagnostic criteria as substance dependent to receive services. Youth patients may receive services for substance abuse as well as substance dependency. Washington State Division of Alcohol and Substance Abuse (DASA) contracts with the King County Department of Community and Human Services to organize access to care in King County through community-based services. Intervention and treatment are prioritized for:

- Pregnant women, new mothers, and families with children;
- Injection drug users;
- People with HIV/AIDS;
- Referrals from Child Protective Services; and,
- Street youth and youth in conflict with their families.

Although outpatient treatment is currently available for clients on Medicaid, not all King County residents in need of substance abuse treatment are currently accessing those services. For example:

- Of 18,116 persons meeting eligibility criteria and identified as needing treatment by the 2006 Washington State Department of Alcohol and Substance Abuse survey of King County households, only 24% (5,840) were being served.

- 2,274 people received opiate substitution services in 2005, but demand currently exceeds supply of treatment. As of September 30, 2007, there were 281 people in King County on the waiting list for opiate substitution treatment (Methadone). Of those, 69% reside in Seattle; 26% in King County outside Seattle; 3% are from other counties, and 2% have missing data.

As a result of the 2005-2007 Washington state legislative session, additional funds were secured to expand services to Medicaid and GA-U recipients. Clients in need of substance abuse services in the following categories are able to access outpatient treatment services immediately: SSI/SSI-Related, GA-X, GA-U, TANF and other Medicaid public assistance types.

F. Summary

King County residents are about as likely to lack health insurance as they were 10 years ago. Some subgroups showed increases in the prevalence of uninsurance. Lack of health insurance has been shown to be associated with lower levels of preventive care and greater morbidity and mortality. Inequities in the burden of lack of insurance are persistent or slowly increasing. The poor and near poor have 10 times the risk of lacking health insurance than those in the highest income bracket. Latinos—especially those who primarily speak Spanish—immigrant children, African Americans and American Indians/Alaska Natives are at especially high risk. Those living in South King County are at higher risk than Eastside residents.

Insurance coverage that is inadequate exposes people to serious financial risk. We estimated that one in 10 insured adults are underinsured. There is inequity in underinsurance, with poor people and those who are already ill much more likely to be underinsured.

Lack of dental insurance is much more common than lack of health coverage. Over one in four adults are in this group. As with medical insurance, the near-poor are most likely to lack dental insurance, but in contrast to medical insurance, those over 65 have the highest rates of uninsurance. There are large disparities in dental utilization as well.[21]

Medicaid pays for health services of different types for one in six King County residents, including one third of children and 38% of infant deliveries. Medicaid eligibility is complex with access depending on specific characteristics of the enrollee, their income and assets and the type of Medicaid coverage for which they qualify.

Mental health services for low-income people are provided primarily through the Regional Support Network. There is limited access for those without Medicaid and for those whose severity of illness does not qualify them for services. Similarly, chemical dependency treatment is available for those who qualify for Medicaid, but many King County residents ineligible for Medicaid are not able to access the treatment they need.

[21] Data sources: Behavioral Risk Factor Surveillance Survey (adults) and Washington State Population Survey (children)

3. The Core Health Safety Net System in King County

A. Description and Trends

For purposes of this assessment, core safety net providers are defined as community health centers, public health centers, and other clinics that have a primary mission to serve low-income populations, including clients who have no health insurance coverage, those with Medicaid or other publicly sponsored coverage, and those with sporadic coverage. As defined for purposes of this assessment, King County's core safety net providers and their designation as federally qualified health centers (FQHCs) include:

- Community Health Centers of King County (FQHC)
- Country Doctor Community Health Centers (FQHC)
- Harborview Medical Center's primary care clinics, including Pioneer Square Clinic
- International Community Health Services (FQHC)
- Odessa Brown Children's Clinics
- Public Health—Seattle & King County - Public Health Centers (FQHC)
- Puget Sound Neighborhood Health Centers (FQHC)
- Sea Mar Community Health Centers (FQHC)
- Seattle Indian Health Board (FQHC)

See Appendix D for map of the core safety net providers' locations.

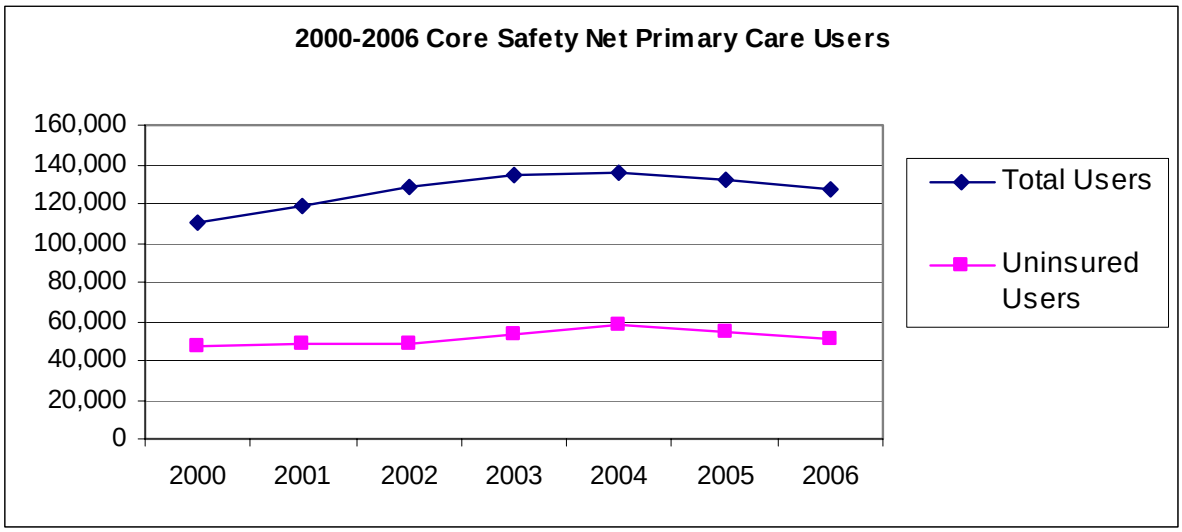
Of the nine entities listed above, seven receive at least one type of federal health center grant through the Consolidated Health Center program of the U.S. Department of Health & Human Services, Health Resources and Services Administration, Bureau of Primary Health Care. They are also known as Federally Qualified Health Centers, or FQHCs. By law, FQHCs provide primary care and other services to medically underserved populations, must offer a sliding fee scale, and cannot deny health care services due to an individual's inability to pay.

Target populations for core safety net providers include the uninsured, underinsured and those eligible for publicly sponsored health insurance programs. These target populations include many low-income communities, recent immigrants, public housing residents, and homeless individuals and families. In addition, a number of community health centers target services to specific ethnic and racial groups.

Data on the number of unduplicated patients or "users" are reported for core safety net providers in this section, although data for Odessa Brown Children's Medical Clinic and Harborview dental clinics were not available at the time of this report and are not accounted for in the analyses below.

Trends in Safety Net Medical Capacity

Between 2000 and 2006, there has been an overall 16% increase in the number of core safety net primary care users, from 110,000 in 2000 to 127,258 in 2006. The number of uninsured users served by the safety net providers increased by 7% from 47,602 in 2000 to 51,142 in 2006, but the proportion of safety net primary care users who are uninsured has increased over this time period, ranging from 43% in 2000 to 49% in 2006.[22]



Note: Harborview Primary Care Clinic and Odessa Brown Children's Medical Clinic data are not included because historical trend data were not available from these sites. Harborview Pioneer Square clinic data are included.

Both 2005 and 2006 saw a decrease in users from the previous year among both total users and uninsured users. Preliminary data from the first two quarters of 2007 suggest a reversal of this downward trend, with no significant change in the proportion of uninsured users.[23] User race/ethnicity and income demographics have remained about the same from 2000 to 2006.

C. Who is Currently Served?

The table below presents information on the patients or "users" who were served in the core safety net primary medical care system in 2006. Those using core safety net providers were likely to be poor, female and from communities of color. More than one third (38%) were uninsured.

[22] Insured status is defined as "routine medical or dental care costs incurred at patient's most recent visit are covered by a commercial or government-sponsored health plan. Limited coverage programs such as the Washington State Breast and Cervical Health Program do not constitute health plan coverage."

[23] Data is currently available for the first two quarters of 2007 for the eight core safety net agencies included in the above analyses.

Core Safety Net Primary Medical Care Users 2006				
	All Users		Uninsured Users	
Medical Users, Total	**148,083**		55,975	
Percent uninsured				38%
Income % of poverty level*	**n**	**Percent**	n	Percent
100% and below	**83,313**	65%	34,217	67%
101-150%	**18,382**	14%	7,491	15%
151-200%	**6,771**	5%	2,781	5%
Over 200%	**8,344**	7%	2,771	5%
Unknown	**10,448**	8%	3,881	8%
Gender				
Male	**63,319**	43%	24,350	44%
Female	**84,755**	57%	31,617	56%
Other/Unknown*	**9**	0%	6	0%
Age				
0 - 5 years	**18,110**	12%	2,713	5%
6 - 12 years	**12,321**	8%	2,578	5%
13 - 18 years	**10,057**	7%	2,855	5%
19 - 34 years	**38,243**	26%	20,889	37%
35 - 59 years	**53,390**	36%	23,262	42%
60 - 74 years	**12,528**	8%	3,354	6%
75+ years	**3,434**	2%	322	1%
Race / Ethnicity				
Asian/Pacific Islander	**26,732**	18%	6,118	11%
Black/African American	**25,550**	17%	8,055	14%
American Indian/Alaska Native	**4,285**	3%	1,702	3%
White	**44,905**	30%	18,414	33%
Hispanic or Latino	**37,022**	25%	18,238	33%
Unreported	**9,589**	6%	3,446	6%

*HMC Primary Care Clinics data not available for income and “other/unknown” gender.

Includes data from: Community Health Centers of King County, Country Doctor Community Health Centers, International Community Health Services, Harborview Medical Center Pioneer Square Clinic, Puget Sound Neighborhood Health Centers, Public Health–Seattle & King County health centers, SeaMar Community Health Centers, Seattle Indian Health Board and Harborview Medical Center primary care clinics.

Odessa Brown Children’s Medical Clinic data are not included.

“Uninsured users” includes 50,371 King County residents and 5,604 residents of other counties.

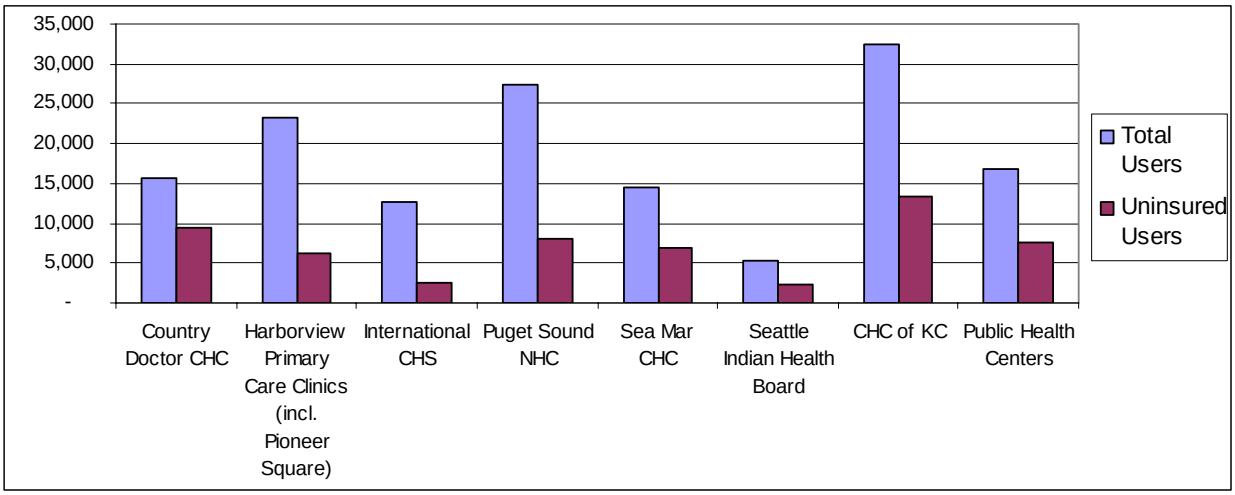
Of those served by core safety net providers, 49% resided in King County communities outside Seattle and 42% resided in Seattle. The table below contrasts users' racial and ethnic categories by residence:[24]

	Latino	White	Asian/PI	Black	Indian/AK
Seattle Users	15%	33%	20%	22%	4%
King County, Outside Seattle	34%	27%	17%	14%	2%

Almost three-quarters (73%) of core safety net medical users in King County communities outside Seattle were people of color, of which almost one-third were Hispanic/Latino. In Seattle, two-thirds of medical users were people of color, of which 22% were African American or East African and 20% were Asian/Pacific Islander.

Core safety net providers provided primary care to 148,083 users in 2006, including 55,975 uninsured users. Users are broken out by provider in the chart below. Users are unduplicated within a provider, but not across providers. Data tables are provided in Appendix E.

Primary Care Users Served by Core Safety Net Providers, 2006

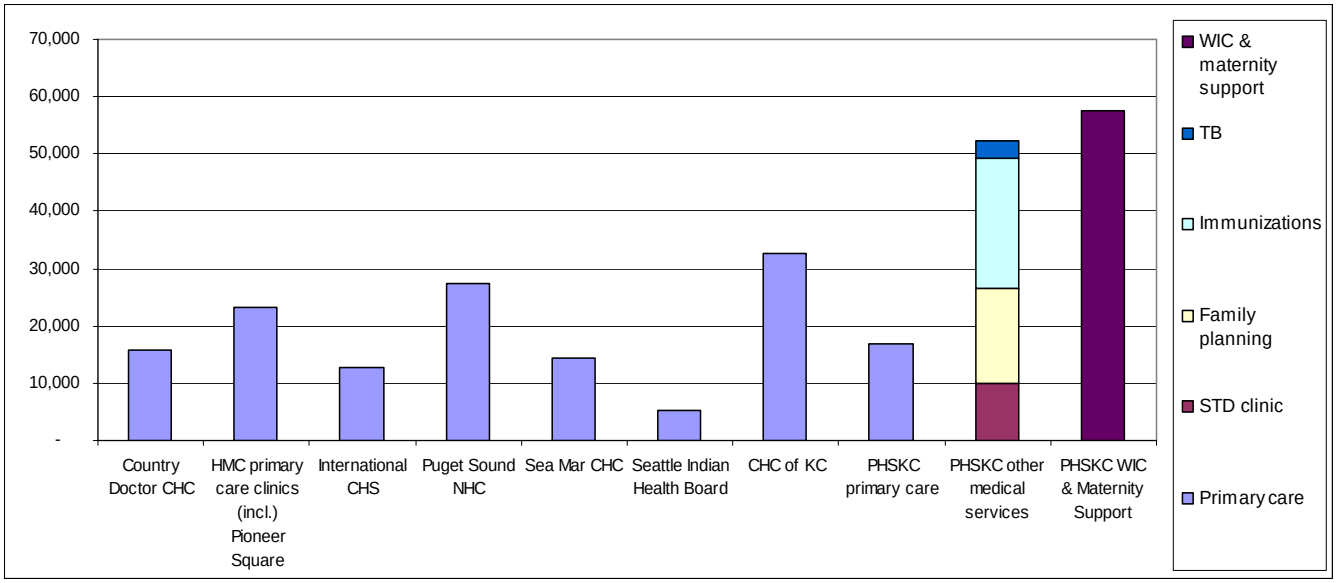


In addition to offering comprehensive primary medical care services at four clinic locations, Public Health−Seattle & King County also offers categorical, prevention-oriented services that are routinely included in the primary care services delivered by other safety net health providers. These services include family planning, testing and treatment for sexually transmitted disease (STD), and immunizations. The chart below shows the number of users served by core safety net providers, including those who receive categorical, prevention-oriented services through PHSKC. Including this group, core safety net providers served a total of 197,596 users in 2006. As above, users are unduplicated within a provider, but not across providers.

[24] Percentages do not add to 100% as racial/ethnic data are not available for all users.

The last column in the table below depicts the volume of other health and social services PHSKC provided in 2006 to specific King County populations. These include maternity support services and WIC nutrition visits for low-income pregnant women and clinical care to patients with communicable diseases, such as tuberculosis and HIV/AIDS. Finally, the public health department delivers health care to those in the King County jails. In 2006, the department provided approximately 20,000 physician and nurse practitioner visits at the Seattle and Kent jails.

Primary Care Users Served by Core Safety Net Providers, Plus PHSKC Family Planning, STD, TB, Non-Travel Immunization, WIC, and Maternity Support Users, 2006



Note: Primary care, STD, tuberculosis, family planning and immunization users are only counted once per user based on service category of last visit. Clients are counted once if seen in both WIC and maternity support services (MSS). Clients seen in WIC/MSS and in one of the first program group are counted once in WIC/MSS and once in the first group. Data tables are available in Appendix E.

D. Uninsured Patients

In this section, information is provided on the subset of core safety net patients who are *uninsured*. Overall, 38% of primary medical users of core safety net providers were uninsured as of their most recent 2006 visit. More than 40% of users were uninsured at the majority of core providers, as described in the table below:

Agency	% Uninsured	Agency	% Uninsured
Country Doctor CHC	59%	CHC King County	41%
HMC Pioneer Square	55%	Puget Sound NHC	29%
Sea Mar CHC	47%	HMC Primary Care Clinics	23%
Public Health SKC	45%	International CHS	20%
Seattle Indian HB	44%		

A significant majority of the uninsured visiting core safety net health centers were:

- Between 35-59 years (42% of uninsured) or 19-34 years (37%)
- Latino (33%) or white (33%)
- Earning less than 200% FPL (87%)

Among safety net users who reside in Seattle, 35% were uninsured, while 39% of safety net users residing in King County outside of Seattle were uninsured. Users living outside King County were more slightly likely to be uninsured (41%), but represented a relatively small number of users (9% of all users).

E. The Uninsured and the Health Care Safety Net

In the table below, we combined local phone surveys[25] and safety net demographic data to estimate the number and percentage of uninsured who are served (and not served) by core safety net providers throughout the county. We divided the number of uninsured seen in the safety net by the number of uninsured in the entire county population to calculate an estimate of the percentage of uninsured who are being served by safety net providers.[26] We analyzed these rates by region, poverty, age, gender and race where data was available.

Overall, of the total of about 140,000 King County uninsured residents, over one-third (about 50,000) receive primary care services at core safety net health centers. The analysis shows that access to the safety net for the uninsured in vulnerable populations is mixed. Safety net providers—who reach out to people of color and those living at or near poverty—are seeing these efforts pay off in better coverage in these groups. Yet substantial numbers of the vulnerable uninsured are still outside the system, including the near-poor, residents of South Region and people of color.

Safety net providers are decidedly more successful with some of the vulnerable populations that are their historical target market. For instance, uninsured people of color are about three times as likely as white people to be seen in the safety net. Also, well over half of the uninsured living in poverty[27] are in the safety net, in contrast to one in 25 of those uninsured living at 200% of poverty and above. The near-poor uninsured—those living between 100% and 200% of the Federal Poverty Level (FPL)—are clearly more likely to be safety net clients than their more affluent counterparts. Even so, a solid majority of this group are not seen in the safety net. Altogether, a total of about 50,000 uninsured King County residents living below 200% of the poverty guideline[28]—the widely shared definition of a "living wage"—do not get care in the safety net. Although uninsured people of color are more likely to be safety net clients, close to half or more of this group remain outside of the system.

[25] Surveys providing data on the uninsured are: the Washington State Behavioral Risk Factor Surveillance Survey and the Washington State Office of Financial Management State Population Survey.
[26] This analysis combined survey data with clinic user data. Survey data has margin of error, which is not accounted for in this analysis. See data note, Section 2 B. Clinic users were unduplicated within clinics but not between clinics.
[27] In 2008, a family of four living in poverty would earn $21,200 or less (see http://aspe.hhs.gov/poverty/08poverty.shtml).
[28] In 2008, a family of four living below 200% of the Federal Poverty Level would earn $42,400 or less.

King County Uninsured Who Receive Primary Care in Safety Net*

	Number of Uninsured in Population**	Percent of Uninsured Seen in Safety Net	Number of Uninsured Seen in Safety Net	Number of Uninsured NOT Seen in Safety Net
Total (SPS)				
All	139,810	36%	50,371	89,439
Region (age 19-59) (BRFSS)				
South + White Center	68,709	17%	11,725	56,984
East	23,178	17%	3,979	19,199
North	13,379	14%	1,841	11,538
Seattle	53,019	41%	21,982	31,037
Income Level† (SPS)				
100% & below	49,866	59%	29,294	20,572
101-150%	18,046	34%	6,212	11,834
151-200%	20,209	11%	2,318	17,891
Over 200%	51,689	4%	2,276	49,413
Gender (SPS)				
Male	85,515	23%	19,576	65,939
Female	54,295	48%	25,971	28,324
Age (SPS)				
0 - 12 years	6,178	70%	4,341	1,837
13 - 18 years	8,780	27%	2,340	6,440
19 - 34 years	73,194	23%	16,576	56,618
35 - 59 years	46,958	49%	22,951	24,007
19 - 59 combined	120,152	33%	39,527	80,625
Race (SPS)				
Asian/PI	¶	52%	¶	¶
Black/AA	¶	42%	¶	¶
Am. Indian/AK	¶‡	‡	¶‡	¶‡
White	¶	15%	¶	¶
Latino	¶	50%	¶	¶

IMPORTANT NOTES:

*This table includes data from the following clinics: Country Doctor, International Community Health Services, Puget Sound Neighborhood Health Centers, Pioneer Square Clinic (Harborview Medical Center), SeaMar, Seattle Indian Health Board, Public Health, Community Health Centers of King County and Harborview Medical Center. The following providers serve large numbers of Medicaid and/or uninsured people, but are not included because data were not available: Valley Medical Center Valley Family Medicine, Odessa Brown Children's Medical Clinic, Swedish Physicians Providence Clinic and Residency Programs, Group Health Cooperative Rainier Valley and South King County Primary Care Clinics, Highline Medical Group Roxbury Clinic & Burien Family Medicine.

**For figures in "Number of Uninsured" column, survey error ranges from ±1.5% to ±6% (not shown above).

† Poverty level categories excludes data from Harborview Medical Center, which does not provide this data.

¶For insurance coverage by race, we only show percentages, in order to estimate the overall directions. The State Population Survey cautions against presenting numbers of uninsured by race because survey weights are not accurate for this type of sub-analysis of the uninsured.

‡Figures for American Indian/Alaska Natives are not reported because of extremely small sample size.

Totals may not be consistent due to different survey data sources for the uninsured. For instance, the aggregated "Number of Uninsured in Population" by King County Region exceeds figure in the "All" row, even though the Region figures are for 19-to-59 year-olds and the All is all ages. Other inconsistencies are due to differences in reporting of demographics by safety net providers.

Data Sources:
PHSKC table: "Medical All Users + HMC by region CY 2006.xls", CHS, 1/29/2008.
BRFSS: Source is Behavioral Risk Factor Surveillance Survey, 2002-2006 average
SPS: Source is Washington State Population Survey, 2006

Safety net providers serving the uninsured living in the City of Seattle are seeing well over half of this group. However, less than one in five uninsured living in White Center and South Region, an area with high poverty and a relatively large immigrant population, are in the system. The difference may be because people in Seattle enjoy a higher density of health care centers and a well-developed mass transportation system that makes it easier to get there. Other barriers South Region residents are more likely to face when seeking care include a different language and culture in immigrant populations, and fear of punitive legal consequences among undocumented people. While low percentages of uninsured North and East Region residents are in the safety net, there are also fewer living in these areas that are in the traditional target population for safety net providers.

Safety net providers see a higher percentage of uninsured women, many of whom are of childbearing age. Coverage is also comparatively good for uninsured young children 12 and under, seven of 10 of whom are in the safety net. However, half the uninsured 35-to-59-year old adults, many of whom should be getting preventive screenings or chronic disease management, are not getting primary care through the safety net providers.

Of those who do get care in the safety net, we do not know how many have all or only a portion of their primary care needs met. Conversely, some uninsured people who are not seen by core safety net providers likely do receive primary care and/or urgent care through emergency departments, charity care, or through self-pay—especially those who are relatively better off. In 2005, a random sample of uninsured King County adults reported that most would get needed care through a clinic or doctor. Responses included go to a clinic (40%), a doctor (28%), or an emergency department (21%).[29] (The response categories did not include the option of indicating that the respondent had no options for care.)

As an analysis of one component of health care access, we hope that these findings encourage discussion. We note that the table looks at utilization of (and implies access to) the safety net for the uninsured population. It is not always an accurate picture of access to health care for the entire population. For instance, other surveys show lack of health insurance is second highest in Seattle and highest in people of color, a different pattern from that described above.

Overall, access to care is related to multiple factors, and both insurance status and income affect access. However, looking at whether people have a personal doctor—a measure of access—insurance status has greater effect than household income (see table below).

[29] 2005 Behavioral Risk Factor Surveillance Survey, King County

Percentage of King County adults who have a personal doctor by insurance status and annual household income, Age 18 to 64, 2000 to 2004 average

	Insurance Status	
Annual Household Income	*Insured*	*Not Insured*
Below 200% of FPL	76%	39%
200% and Above of FPL	85%	47%
Total	84%	41%

Source: Washington State Behavioral Risk Factor Surveillance Survey
Analysis and Production: APDE, PHSKC, 1/08
FPL is Federal Poverty Level. In 2004, 200% of the poverty guideline for a family of four was $37,700.

F. Economic Stressors on Safety Net Providers

Many aspects of health care financing, changes in insurance markets, low payment levels, recruitment and other factors contribute to operations costs and stress the resources of core safety net providers.

Federal payment changes. Additional payments intended to help cover the costs of providing care to the uninsured are available to federally qualified health centers (FQHC) as supplemental revenue for visits provided to patients enrolled in a federally qualified Medicaid program.[30] However, the costs of providing health care are increasing faster than rates of increases in FQHC payments. In 2000, Congress enacted legislation that changed methodology for establishing FQHC rates from an allowable cost basis to a prospective payment system (PPS). Under PPS, the FQHC rate increases annually according to the Medical Expense Index (MEI). MEI has increased 2-3 percent per year, which does not match the rate of cost inflation in public health or community health centers.

Increasing numbers of underinsured. Safety net providers are seeing increasing numbers of the underinsured. In recent proposals for City of Seattle funding, safety net providers confirmed that increasing numbers of low-income and working poor have access to some level of comprehensive medical coverage, but are frequently unable to afford the out-of-pocket costs and higher deductibles now common in the market. High out-of-pocket costs can be particularly burdensome for people with chronic conditions such as diabetes, who are more likely to forgo needed medications and care because they cannot consistently afford medications or on-going treatment such as glucose testing. Safety net providers must identify other resources to help patients cope with these expenses.

Low payment levels compared to private insurance. Some publicly sponsored insurance products and special programs do not adequately cover the costs of services delivered. State-only coverage, Medicaid fee-for-service reimbursement, and coverage for special screening programs frequently result in many costs to safety net providers that are not adequately reimbursed. For example, payments for the state's program for General Assistance-Unemployable (GA-U) coverage fall short of adequately covering costs associated with providing services to eligible clients. Another example is the state's Breast & Cervical Health

[30] King County's seven FQHC are listed in Section 4 of this report.

Program (BCHP), which offers coverage to low-income women for particular types of screening, but these women often need more additional health care services which are provided by the safety net providers without additional payment.

Challenging payment systems for mental health and chemical dependency services. Nationwide, mental health issues and substance abuse together constitute the leading reason for a visit to a health center.[31] Integrating behavioral health services with primary care leads to improvements in clinic process and patient outcomes, and has been determined to be cost-effective in numerous studies.[32] Consequently, many core safety net providers operate programs in which a behavioral health specialist is fully integrated into a clinic's primary care team; other providers are working to establish such models. Unfortunately, payment for mental health and chemical dependency treatment services provided in safety net clinics is difficult to secure. Behavioral health services are not generally billable in Washington when provided in a primary care setting. An overarching strategy for King County's Veteran's and Human Services Levy is to enhance access to behavioral health services available through health centers, but Levy resources are targeted to very specific patient populations, and cannot be used to support the development of more broadly based behavioral health programs.

Recruitment difficulties. Safety net providers often have more difficulty than other healthcare organizations in recruiting and retaining primary care providers, nursing staff, dentists, and dental hygienists and assistants. Safety net providers must compete with larger health care organizations in recruiting personnel, making it more difficult to maintain stable efficient clinic teams, offer nurse phone and in-person consultation, and other types of patient support. Dentists committed to working with low-income individuals and families are in particularly short supply. Dentists in the region are older than the national average, and retiring dentists are not all being replaced. In Washington, 50% of dentists are predicted to retire by 2013. In addition, more and more providers prefer to work less than full time, further driving up the total costs of salaries and benefits.

Limited ability to refer for specialty services. Access to specialty care is severely limited, and safety net providers must incur many additional costs in supporting their patients to obtain needed services and procedures. PHSKC, Project Access and the Community Health Council of Seattle & King County have previously estimated that 23% of safety net visits lead to a referral for specialty care (2003-2004 data). Many specialists strictly limit or do not take Medicaid referrals. King County Project Access is refining referral systems and provider networks to serve those who are uninsured and underinsured, but needs are very pressing throughout King County.

A recent system study of health centers' specialty referral processes identified numerous operational issues which are now being addressed.[33] Of more than 50,000 referrals made by

[31] 2003 Uniform Data System, cited in "Health Centers' Role in Addressing the Behavioral Health Needs of Medically Underserved." September 2004 Issue Brief from National Assoc. of Community Health Centers

[32] Mancuso, D and Estee, S. "Washington State Mental Health Services Cost Offsets and Client Outcomes Technical Report." Washington State DSHS Management Services Administration, Research and Data Analysis Division. December 2003.

[33] System Study for Public Health and Community Health Centers' Specialty Referrals: Final Report to the Pacific Hospital Preservation and Development Authority, July 2007.

participating providers during the twelve months in the study, key specialty areas lacking adequate referral sources included gastroenterology, otolaryngology, orthopedics, and cardiology.

G. Summary

Core safety net providers in King County, made up of seven FQHC systems and Harborview primary care clinics, provided primary care services to 148,083 patients in 2006, and of these 55,975 (38%) were uninsured. In addition, Odessa Brown Children's Medical Clinic provided care for 3,500 children, mainly with Medicaid coverage.

Two thirds (65%) of those obtaining services at core safety net providers had incomes under the federal poverty level. Almost two thirds (62%) were adults between 19 and 59. One third (30%) were white, one fourth (25%) were Hispanic, and about one fifth (18%) were Asian/Pacific Islander or black.

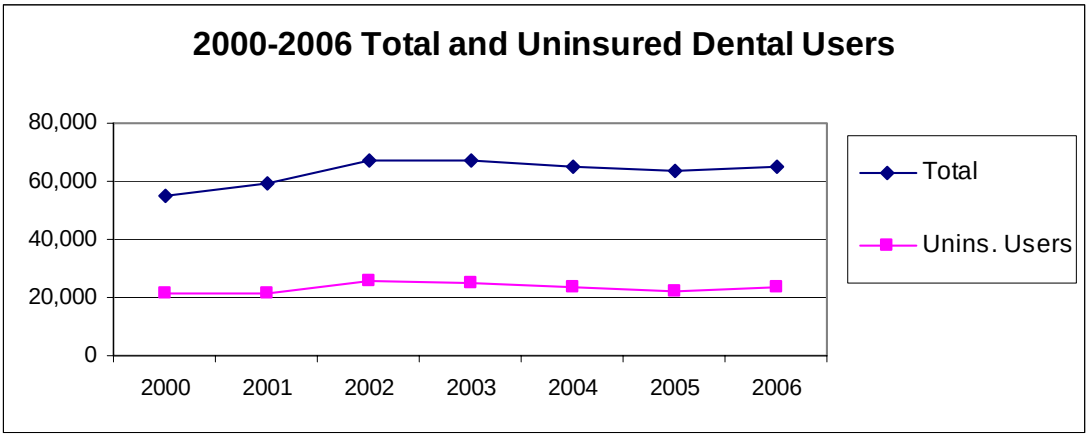
The number of uninsured served by the core safety net providers (55,975 individuals) accounts for about one third of the total number of uninsured in the county (140,000 individuals). Based on national research linking lack of insurance to limited access to health services and to adverse health outcomes, we assume that a substantial portion of the uninsured in King County face substantial access barriers to primary medical care. About half of uninsured who do not obtain care at safety net providers live in South King County (almost 57,000 people).

Core safety net providers face increasing financial stress due to restrictions in federal funding since 2000, changes in the health insurance market that make catastrophic policies more prevalent, and recruitment and burnout hardships for staff working in this environment.

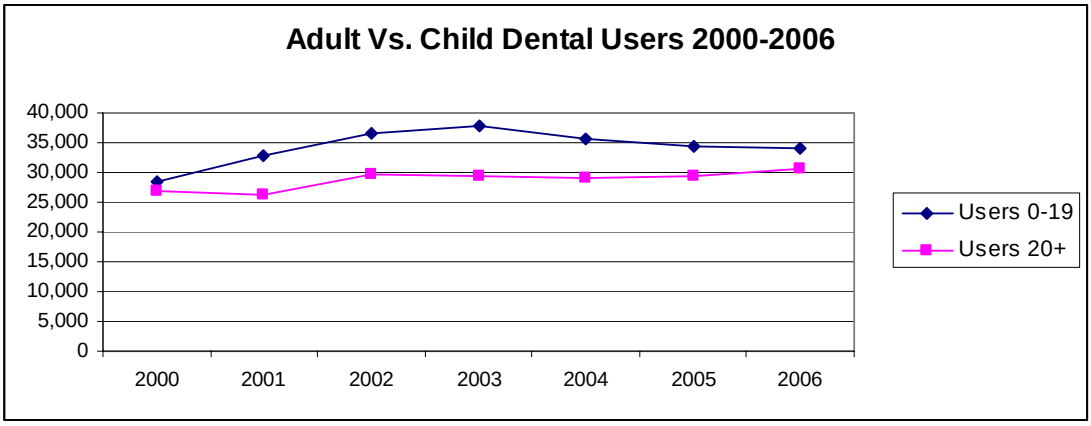
4. The Dental Safety Net in King County

A. Description and Trends

For core dental safety net providers[34], there has been a 17% increase in dental patients between 2000 and 2006, from 55,291 in 2000 to 64,832 in 2006. The number of uninsured patients increased from 21,172 in 2000 to 23,223 in 2006, but the percent of uninsured dental safety net patients has remained relatively flat, ranging from 36 to 38%. Dental patient race/ethnicity and income demographics also have remained constant during this time.



Much of the overall increase in patients or "users" is due to higher levels of Medicaid coverage and payment levels for children's versus adult dental services and correspondingly greater provider capacity. As the table below shows, the number of child patients has exceeded adult patients every year since 2000. Pediatric dental users increased by 21% from 28,319 users in 2000 to 34,169 users in 2006. Adult dental users, who are more likely to be uninsured, increased by 14%, from 26,972 users in 2000 to 30,663 users in 2006.



[34] Data included in this report are from Community Health Centers of King County, International Community Health Services, Harborview Medical Center Pioneer Square Clinic, Odessa Brown Children's Clinic, Puget Sound Neighborhood Health Centers, Public Health–Seattle & King County dental clinics, SeaMar Community Health Centers, and Seattle Indian Health Board. Harborview Medical Center dental clinic data were not available.

B. Who is Currently Served?

Core Safety Net Dental Care Users 2006				
	All Users		Uninsured Users	
Dental Users	**64,832**		23,223	
Percent Uninsured				36%
Income Level	**n**	%	n	**%**
100% & below	**37,875**	58%	14,970	64%
101-150%	**10,069**	16%	4,328	19%
151-200%	**7,801**	12%	1,689	7%
Over 200%	**4,323**	7%	904	4%
Unknown	**4,764**	7%	1,332	6%
Gender				
Male	**29,452**	45%	11,265	49%
Female	**35,378**	55%	11,960	52%
Age				
0-5 years	**11,151**	17%	1,275	5%
6-12 years	**14,775**	23%	2,597	11%
13-18 years	**8,243**	13%	1,701	7%
19-34 years	**12,470**	19%	6,746	29%
35-59 years	**13,480**	21%	8,310	36%
60-74 years	**3,412**	5%	1,921	8%
75+ years	**1,301**	2%	676	3%
Race / Ethnicity				
Asian/PI	**11,903**	18%	3,847	17%
Black/AA	**11,872**	18%	3,241	14%
Am. Indian/AK	**1,504**	2%	646	3%
White	**16,618**	26%	7,224	31%
Latino	**17,986**	28%	6,809	29%
Unreported	**4,949**	8%	1,459	6%

Includes data from Community Health Centers of King County, International Community Health Services, Harborview Medical Center Pioneer Square Clinic, Odessa Brown Children's Clinic, Puget Sound Neighborhood Health Centers, Public Health – Seattle & King County dental clinics, SeaMar Community Health Centers, and Seattle Indian Health Board.

Of those served by core safety net providers, 58% resided in King County communities and 35% resided in Seattle neighborhoods. The table below contrasts users' racial / ethnic categories by residence:[35]

	Latino	**White**	**Asian/PI**	**Black**	**Indian/AK**
Seattle Users	18%	24%	23%	25%	3%
KC Users	35%	28%	16%	13%	2%

[35] Percentages do not add to 100% as racial/ethnic data are not available for all users.

C. Uninsured Dental Patients

Overall, 36% of all dental patients at dental safety net providers were uninsured as of their most recent 2006 visit. Among those dental safety net providers who serve a majority of adults, the uninsured represented an even greater percentage of their patients.

Among children, 16% of 2006 dental users were uninsured, while among adults (19 and older), 58% of dental users were uninsured. Odessa Brown and Public Health clinics primarily see patients who are children (comprising 99% and 72% of their clinics' users respectively) who have better access to Medicaid coverage than do adults. The proportion of provider's patients who are adults is strongly correlated to the percentage of dental patients who are uninsured, as illustrated in the table below.

Provider	% Uninsured	% Adults
Seattle Indian HB	53%	75%
Puget Sound NHC	46%	65%
Sea Mar CHC	46%	58%
International CHS	35%	67%
CHC of King County	34%	50%
Public Health SKC	29%	28%
Odessa Brown CC	8%	1%

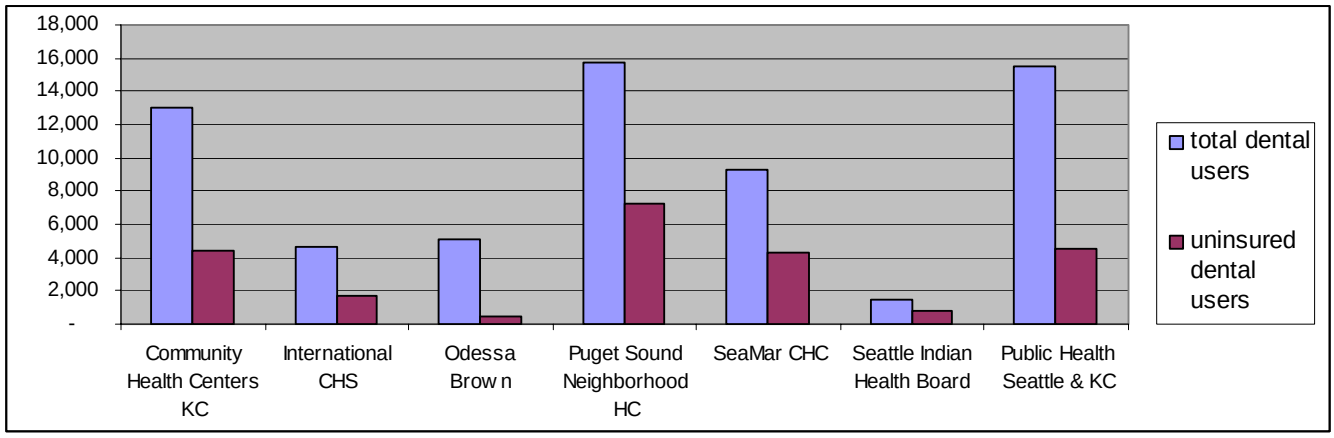
A significant proportion of uninsured dental patients were:

- Latino (29%) or white (31%)
- Between 35-59 years (36% of uninsured) or 19-34 years (29%)
- Earning less than 200% FPL (90%).

Thirty-eight percent of patients residing in Seattle were uninsured as compared to 35% of patients residing in King County but outside Seattle. Those living outside King County were significantly more likely to be uninsured (46%), but represented a relatively small number of users.

Core safety net providers served 64,832 dental users in 2006, including 23,223 uninsured users. Users are broken out by provider in the chart below. Users are unduplicated within a provider, but not across providers. In addition to the dental care provided at Public Health clinics, PHSKC provided about 4,000 dental visits to inmates at the Seattle and Kent jails. Detailed user data tables are available in Appendix E.

Dental Users Served by Core Safety Net Providers, 2006



D. Those Uninsured for Dental Who Are Not Seen

Current data are not available to calculate the total number of people in King County who lack dental insurance, and thus we cannot calculate how many of the uninsured were not seen by the dental safety net. As an approximation, we can look to the most recent survey data from 2001, when 27% or approximately 382,000 of King County adults had no dental insurance. In 2001, the dental safety net providers served a total of 21,740 uninsured patients, including uninsured children. It appears that 6% or less of adults without dental coverage went to a core safety net dental provider in that year.

Assuming this trend has continued, it seems that a substantial majority of King County residents uninsured for dental care either self-pay for dental care at private dental providers or forego needed dental services. It can be concluded that many low-income people with dental problems are at great risk of not being able to obtain needed care.

Access to dental care is a major public health problem in King County, largely as a result of two factors:

- **Inadequate public financing.** Publicly funded dental coverage has very restricted eligibility, especially for adults, and those with such coverage must find dentists willing to accept payment rates that average about 30% of the privately insured. Pediatric dental rates were increased in 2008. Nonetheless, many private dentists do not accept Medicaid patients.

- **Dentist workforce shortage.** Dentists committed to working with low-income individuals and families are in increasingly short supply. While Seattle is one of only three Washington state communities targeted by the State Department of Health to receive funds to add dental residency slots in health centers – it received funding for only two new residency positions in 2005.

Access for low-income adults, particularly people of color, is at a critically low level. Based on recent population growth and 2006 phone survey results, the number of adults 18 and older who did not see a dentist in the past year is estimated to be around 300,000 King County residents.[36]

Across King County, 21% of adults - both insured and uninsured - did not see a dentist in the past year.[37] Low-income persons, Hispanics, and African Americans were less likely to visit a dentist within the past year than whites. Although the overall percent of King County adults who have not seen a dentist in the past year has declined since 2000, this percentage has increased in south King County; it has also increased among Hispanics and Asian Pacific Islanders. Between 1999 and 2004, there was an overall statewide decrease in the percent of adults who had a preventive dental visit. Even when coverage is offered through employers, it often has high deductibles, exclusions, and co-pays so that preventive dental care is frequently not affordable for working poor individuals and families.

Access for low-income children is also inadequate. Because of inadequate state financing and workforce shortages, only around one-third of Medicaid covered children 0-5 years receive dental care, even though they have coverage. [38] In King County, data show the following about participants in the Washington state SMILE Survey (although SMILE survey results are not representative of all King County children, they suggest gaps in access):

- Half of all children in the King County SMILE Survey do not receive regular oral health care.
- Children of color and those in low income families are at least twice as likely, and in Seattle are three times as likely, to have untreated decay. Children who do not speak English are about twice as likely to have untreated decay.
- One out of six third graders in the SMILE survey has untreated decay.
- Only 30% of Medicaid children under six and 40% of those under 19 in King County saw a dentist in 2005.[39]

There are efforts to improve access to oral health services for children with Medicaid, including the Access to Baby and Child Dentistry (ABCD) program[40] and the planned expansion of a dental campus at Children's Hospital. In addition, Group Health Cooperative and the Washington Dental Service have teamed up to provide integrated oral and physical health services.

Recently King County Executive Ron Sims, the King County Council and more than 20 private funders have come together under the Children's Health Initiative to help children in King County enroll in available health coverage, link to medical and dental homes and receive needed preventive care. One of three pilot programs, KC Kids at www.kckidsdental.org, will improve delivery of oral health services to children in families earning between 250% and 300% FPL by

[36] WA State BRFSS 2006
[37] Ibid.
[38] WS State DOH Smile Survey 2005.
[39] Ibid.
[40] Access to Baby and Child Dentistry website, http://www.abcd-dental.org/index.html, accessed 12/13/07.

offering this coverage at no charge in 2008, prior to the State expansion to this income group in 2009.

E. Summary

The dental core safety net providers treated a total of 64,832 patients in 2006, of whom 23,223 (36%) were uninsured. The majority of dental patients, 34,169, were children and 30,663 were adults. Low-income children are substantially more likely to have Medicaid dental coverage than adults, and children's Medicaid dental coverage has higher payment levels than adult coverage. 58% of dental safety net patients had incomes under the federal poverty level. About one fourth were Hispanic (28%) and white (26%). About one fifth were Asian/Pacific Islander (18%) and black (18%).

Data extrapolations show that as few as five or six percent of those without dental coverage in King County obtain dental services from core safety net providers, leaving substantial access challenges for most of the population uninsured for dental.

Publicly funded dental coverage has limited eligibility, especially for adults, and what coverage that is available has low payment levels compared to private insurance. The dental workforce is aging, which may lead to greater access challenges in the future. Some innovative programs, such as the Access to Baby and Child Dentistry program, have made improvements in dental access for young children, but significant gaps exist between population dental needs and dental services available for low-income King County adults.

5. Other Sources of Care for the Uninsured, Underinsured, and Those with Medicaid

A. Description of Medicaid and Other Safety Net Providers

In addition to the core safety net medical and dental providers addressed in the previous chapters, other important parts of the overall safety net system are primary care clinics serving large numbers of Medicaid patients. Group Health Cooperative of Puget Sound provided health care coverage to 3,085 Medicaid managed care enrollees in King County in June 2007. Health care providers contracting with Molina Healthcare of Washington that have the highest Medicaid patient volumes include:

- Highline Medical Group Roxbury Clinic and Burien Family Medicine
- Valley Medical Center Valley Family Medicine
- Northwest Physicians Network
- Multicare Medical Group
- UW Physicians Network
- Pediatric Associates
- Swedish Physicians Providence Clinic and Residency Program[41]

In addition, other safety net providers deliver specialized medical and dental services targeted to diverse, low-income people, frequently in coordination with the core safety net providers. These include:

- Children's Regional Medical Center
- Veterans Administration Hospital and Outpatient Clinics
- Swedish Medical Center Mother Joseph Clinic
- Pacific Medical Center
- Project Access (access to specialty care for uninsured)
- Volunteer medical and dental clinics supported by Rotary Clubs, Northwest Medical Teams International, and by numerous faith-based organizations

To get a complete picture of the primary care, specialty services and hospital services delivered to the uninsured, underinsured and Medicaid populations it would be important to include an analysis of patient data from these organizations. These data are not readily available to Public Health-Seattle & King County and are not included in this report.

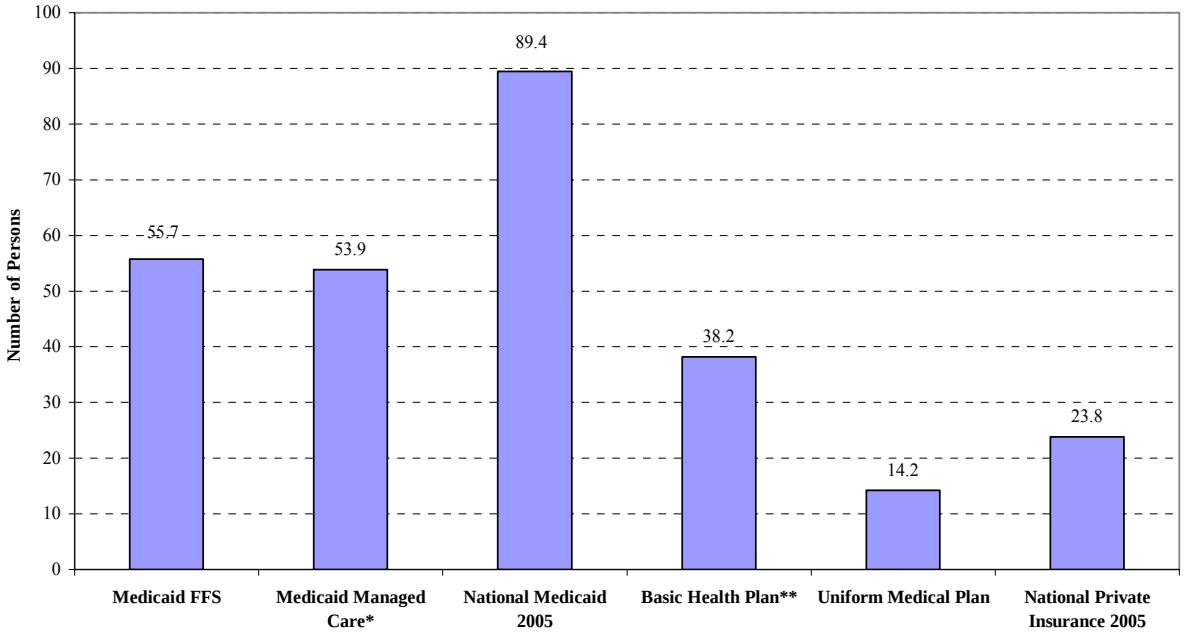
B. Hospital Emergency Departments

Emergency Departments (EDs) of hospitals are required by law to treat all patients regardless of their ability to pay or insurance status. DSHS issued a report on December 1, 2007 on emergency room use in Washington. Their analysis focused on Medicaid, Basic Health and the

[41] Clinics listed are those under contract with the Molina Health Plan who served a significant portion of King County's Medicaid population in 2006. Washington State contracts with three health plans for services to King County residents: Community Health Plan, Group Health and Molina Health Plan of Washington.

public employee Uniform Medical Plan. They showed that Washington state Medicaid fee for service and managed care enrollees use the emergency room at lower rates (62%) than Medicaid enrollees nationwide. Medicaid emergency room visit rates in Washington were three times higher than state employees in the Uniform Medical Plan and twice as high as national private insurance rates. Basic Health Plan enrollee emergency room use was 70% of Washington Medicaid use.[42]

CY 2006 WA State ER Visits Per 100 by Payer Type



** Medicaid managed care plans include Molina, CHPW, Group Health, and Regence BlueShield.*
*** Basic Health Plan includes Molina, CHPW, Group Health, and Kaiser.*

A November 2007 report by the Washington State Hospital Association analyzed data from emergency room visits from 23 Washington hospitals in 2006.[43] The study used an algorithm from New York University that classifies emergency room visits into four categories: non-emergent, emergent but primary care treatable, emergent but avoidable with better primary care and emergent care necessary.

The WSHA study found substantial limitations with the NYU algorithm. Only 58% of the emergency room visits could be categorized. In addition, 24% of all cases where the person was admitted to the hospital from the ER were classified as either non-emergent, or emergent but primary care treatable.

[42] DSHS and HCA, "Report to the Legislature: Reducing Unnecessary Emergency Department Use," December 1, 2007.
[43] Washington State Hospital Association and WSHA Health Information Program, "Washington Emergency Room Use: Safety Net or Unneeded Services?" November 2007.

Despite these analytic shortcomings some interesting findings relevant to the question of where the uninsured obtain health services emerged.

- The percentage of emergency room visits categorized as non-emergent (that is non-emergent, emergent but primary care treatable or emergent but avoidable with better primary care) was similar for Medicaid, commercially insured and uninsured patients (50% for Medicaid, 45% for commercially insured and 48% for the uninsured).
- Potentially avoidable emergency room visits did not cluster by time of day. The percentage of emergency room visits classified as non-emergent ranged from 46% during weekday evenings and weekends to 50% during weekday daytimes and weekday nights, and did not vary notably by payer.
- Potentially avoidable emergency room visits were most common for infants and children under five and least common for teens, adults and seniors. Whereas 68% of emergency room visits for infants without insurance or 60% of those for infants with Medicaid were considered potentially avoidable, only 36% to 42% of those for insured teens and adults were avoidable.
- Potentially avoidable emergency room visits for the uninsured and those with Medicaid were more likely to be due to dental conditions than the common diagnoses for the commercially insured. In addition the uninsured were more likely to visit an emergency room for abscesses and wound infections. Otherwise patients from all payer categories were typically treated for respiratory, urinary tract and ear infections; pneumonia; headache; low back pain; chest pain and fever.

Although overall levels of use of the emergency room by the uninsured were not reported, the WSHA study shows that when comparing non-emergent and emergent ER visits, the uninsured tended to use the emergency room in patterns that were similar to those of people with commercial insurance and with Medicaid. The uninsured were not substantially more likely than those with Medicaid or private coverage to go to an emergency room with a non-emergent condition. They were not more likely to go to an emergency room at particular times of the day or week for a potentially non-emergent reason. The uninsured were similar to those with public and private insurance in that everyone was more likely to bring an infant or young child to the emergency room for a potentially non-emergent reason. The uninsured, however, were more likely to present at the emergency room with somewhat different diagnoses that were potentially avoidable, such as dental disorders, abscesses and wound infections.

C. Free Clinics Sponsored by Civic and Faith-Based Organizations

Several small free clinics, typically open for a few hours on weekends, provide urgent medical care for uninsured people. Most of these clinics work to link people into core safety net health centers for regular primary care:

- *RotaCare Clinic (Renton*): Open Saturday mornings for 2 hours. Located at Salvation Army/Food Bank.
- *RotaCare Clinic (Lake City)*: At North Helpline/Food Bank. Sees average of 14 patients/week.

- *RotaCare Clinic (Bellevue*): Open Saturday mornings for 2-3 hours. Goal is to see 8 – 20 patients. Located at Hopelink Building/Food Bank.
- *Haller Lake Christian Health Clinic*: Open Wednesdays from 5-9 p.m. and Fridays from 9 a.m. – Noon.
- *Christ Community Free Clinic* (Auburn): Open Saturdays 8:30 – 11:30 a.m.
- *Northwest Medical Teams International (Dental)*: Christian relief agency that operates a mobile dental program in Oregon/Washington with 10 vans, one of which operates in King County. Uses volunteer dentists to serve low-income who lack dental care access. Averages 12 visits on the typical 8 a.m. – 2 p.m. clinic day. Partners with social service and faith-based organizations to bring dental care to selected locations.
- *Union Gospel Mission Dental Clinic (Seattle)*: Offers emergency procedures, restorative, oral surgery and hygiene care in a 1500 square foot clinic with three dental operatories. Staffed by volunteer dentists and hygienists.
- *Mother Joseph Clinic*: Providence Campus, Swedish Medical Center. The clinic provides orthopedics and other specialty medical care to indigent and uninsured patients in the Seattle area. The clinic does not ask patients to pay for their care, which is provided by volunteer board-certified specialists.

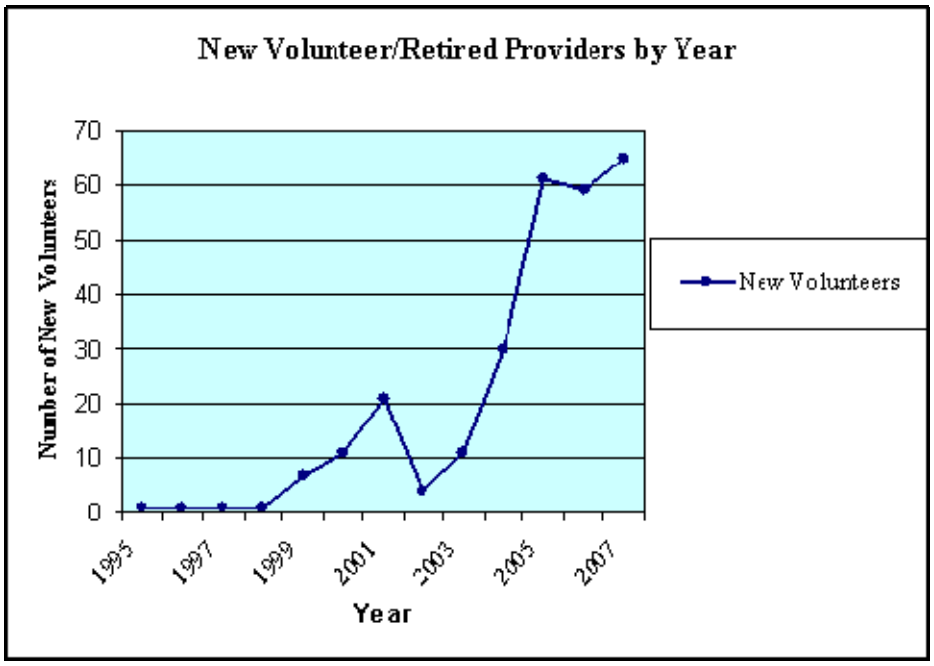
D. Volunteers and Retired Health Care Providers

Volunteer providers play an important role in extending access to care for the uninsured, caring for patients in some of the core health safety net clinics, as well as in free clinics organized by civic and faith-based groups.

Many of these health programs are approved sites under the Washington State Volunteer/ Retired Providers Malpractice Insurance Program. The intent of the program is to extend access to primary care services among low-income individuals. The program funds insurance for volunteer physicians, physician assistants, nurse practitioners, registered nurses, licensed mental health providers, pharmacists, dentists and dental hygienists.

Program insurance covers providers when they are engaged in providing primary, non-invasive care to low-income persons. This includes injections, suturing of minor lacerations and incisions of boils or superficial abscesses. Non-invasive dental care includes diagnosis, oral hygiene, restoration, and extractions. Obstetric care, orthodontia and other invasive treatments cannot be covered. Insurance is available for retired volunteers, or for active providers whose insurance is site-specific but who volunteer at other sites. The program also covers the cost of license renewal for retired volunteers.

The program began in 1992 with fewer than a dozen physicians; large jumps in the number of volunteer providers occurred in the last few years following approval of increased program funding from the Washington legislature. With 225 currently active volunteers across the state, the Volunteer/Retired Providers (VRP) Program, has reached its largest size in program history.



By June 2007, the VRP Program had exhausted the annual budget for new volunteer malpractice premiums. In order to be able to continue to grow, the program negotiated an umbrella policy with individual limits for each volunteer. Following a competitive process, the Department of Health accepted a bid submitted by Washington Casualty, located in Issaquah. As a result of this change, funding is still available to provide malpractice for new volunteers.

Currently in King County, there are 34 clinics associated with the Volunteer/Retired Providers Program. Of these 34 sites, dental services are provided at 9 sites, medical services are provided at 26 sites and mental health services are provided at two sites. Some 77 volunteer providers in King County are insured through this program.[44]

E. Summary

This section reports on health care providers in King County that along with the core safety net providers deliver health care to the uninsured, underinsured and those with Medicaid. These providers include large medical practices, hospitals and their emergency departments, and an increasing number of volunteer clinics and providers. Those who are uninsured, underinsured or with Medicaid coverage obtain care from this loose system of medical, dental and behavioral health providers, whose members face unique and common challenges in striving to meet these needs.

[44] E-mail communication with VRP Program Coordinator Christine Lindquist, January 11, 2008.

6. Population Health Needs: Services Provided and Gaps

Some readily definable subpopulations in King County are more likely to have specific health care needs beyond medical and dental primary care than the general population. These include people with communicable or contagious diseases, those with chronic conditions, those with mental health and chemical dependency issues, those who are homeless, those in jail, women who are pregnant or trying not to get pregnant, refugees and veterans. This chapter references existing annual reports and other documents to provide a brief overview of the specified population, their health needs, their use of health services and the possible gap between needs and available services. These descriptions are offered so that the situations of individuals with special health conditions can inform improved design of the safety net health system.

A. People with Communicable Diseases

This section provides basic population size, health needs, utilization information and gaps between needs and services available for three categories of people with communicable diseases in King County: those with HIV/AIDS, tuberculosis (TB) and other sexually transmitted diseases (STDs).

i. People with HIV/AIDS

Population with HIV/AIDS
In King County, there are an estimated 7,200 to 8,400 people living with HIV infection including AIDS. These include 6,031 known cases. There were 478 new diagnoses in 2006.[45] It is estimated that 76% of King County residents who are HIV+ and aware of their serostatus are in care and 24% are "not in care."

Health Services Utilization of Population with HIV/AIDS
About 90% of those newly diagnosed with HIV enter care within 3 months. Public Health staff contact the diagnosing provider and attempt to contact all patients in order to offer standardized partner counseling and referral services.

Ninety-four percent of people responding to an HIV/AIDS needs assessment survey reported current utilization of primary medical care. Seventy-seven percent were currently using case management services, 71% reported using the Washington State AIDS Drug Assistance Program (ADAP) and 67% reported using dental care services.

Service Gaps Identified by Population with HIV/AIDS
Survey respondents identified lack of access to emergency financial assistance as the number one service gap (33%). 27% of respondents identified a gap in accessing grocery vouchers and 21%

[45] 2003 Seattle-King County HIV/CARE Services Comprehensive Needs Assessment, at www.metrokc.gov/health, and HIV/AIDS Epidemiology Unit, Public Health—Seattle & King County and the Infectious Disease and Reproductive Health Assessment Unit, Washington State Department of Health. HIV/AIDS Epidemiology Report, Second Half 2006: Volume 69 at http://www.metrokc.gov/health/apu/epi/epireports.htm. Access Jan 24, 2008.

identified a gap in help paying for utilities. Other services that were ranked as a gap by more than a 20% of respondents were housing assistance/housing related services and psychosocial support.

ii. People with Tuberculosis (TB)

TB Population

In 2006, King County reported 145 cases of active tuberculosis (TB) disease, 18% higher than the previous year.[46] In 2006, King County had a TB rate of 7.9 cases per every 100,000 individuals; this rate is higher than the national rate (4.6 per 100,000). Eighty percent of the 145 cases reported (116 cases) were born outside the United States, an increase from 95 foreign-born cases (75% of all cases) in 2005. King County has a large pool of individuals with latent TB infection – an estimated 100,000 people in King County.

TB Treatment

The proportion of TB patients initially placed on a standard four-drug regimen is above 90 percent. The proportion of patients who were treated with directly observed therapy has increased from 61% in 2001 to 99% in 2004, the latest year with complete treatment outcome data.

In 2006, 1,026 individuals were identified as close contacts to infectious TB cases. Seventy-five percent (773) of these contacts were located and screened by PHSKC staff for both active and latent TB.

iii. People with Sexually Transmitted Diseases

In 2006, 5,319 cases of chlamydial infection were reported among residents of King County, for an overall incidence of 294 per 100,000 persons.[47]

In 2006, 1,987 cases of gonorrhea were diagnosed among King County residents, for an incidence of 110 per 100,000 persons. The rate is 148 per 100,000 for men and 78 per 100,000 for women.

Of the 185 total cases of early syphilis in King County in 2005, 174 (94%) were among men who have sex with men (MSM), for an incidence of 2,195 per 100,000 among MSM.

Data were not available at the time of this report about health care utilization and service gaps for those with STDs.

[46] Seattle & King County Annual Tuberculosis Report, 2006.
[47] Public Health – Seattle and King County 2006 STD Epidemiology Report. https://www.metrokc.gov/health/apu/std/2006-STD-Epidemiology-Report.pdf, accessed 1/14/08.

B. People with Chronic Diseases

Chronic conditions such as heart disease, diabetes and obesity, lung diseases and injuries are the leading causes of death and disability in King County. Tobacco use, physical inactivity and poor nutrition are important risk factors for developing many chronic conditions.

Chronic diseases cause the majority (65%) of deaths in King County. In 2003, cancer killed 2,816 people; heart disease 2,714; lung conditions 520; and diabetes killed 356 and contributed to 610 deaths. Of particular concern is the doubling of diabetes cases in the past decade and the rapid increase in obesity. Heart disease and cancer rates, by contrast, have been declining.

Smoking among adults is declining and currently 14% of King County residents age 18 and older smoke. Tobacco addiction usually begins early in life; 9% of King County children in 6th, 8th, 10th and 12th grades combined have smoked at least once in the last 30 days.

The obesity rates in adults and children continue to climb. One in five King County adults (20%) is obese and more than half of adults (54%) are overweight. Nearly 9% of school age children are overweight. Only 57% of King County adults meet physical activity recommendations and 14% are completely inactive. The percentage of grade school children meeting activity recommendations decreases as children grow older (83% in 8th grade to 65% in 12th grade). In 2006, 28% of adults reported eating the recommended five servings of fruits and vegetables per day. Among children in grades eight, ten and twelve, 33%, 26% and 25% ate five-a-day respectively. Substantial disparities by race/ethnicity, income and community are seen in unhealthy weight and physical inactivity.

More information about those with chronic conditions is available from the King County AIMs High project, "Health of King County 2006" and the Community Health Indicators websites.[48]

C. People Experiencing Homelessness

Homeless Population

The 2007 One Night Count identified 7,839 people as homeless in King County on a given night. An estimated total of 24,000 people are homeless over the course of a year. Homeless people experience many health problems at rates 3 to 6 times higher than housed people.[49]

Utilization of Health Services

Two data sources indicate that **about half** of the homeless population who use shelters or transitional programs in King County have health care coverage and half are uninsured.[50] Homeless families with children are most likely to have coverage, because most fall into the federal Medicaid eligibility categories. Single adults, by contrast, are more likely to be

[48] King County AIMs High, http://www.metrokc.gov/aimshigh/search2.asp?HEHealthProm, Health of King County 2006, http://www.metrokc.gov/health/hokc/index.htm and Community Health Indicators, http://www.metrokc.gov/health/CHI/.
[49] National Health Care for the Homeless Council: http://www.nhchc.org
[50] The 2007 One Night County and data from the Health Care for the Homeless network.

uninsured, although some have temporary coverage through GAU, and some have on-going coverage if they are on SSI due to a disabling physical or mental condition.

Outstationed services in homeless program sites. Through the Health Care for the Homeless Network, nursing, mental health/chemical dependency services, and health case management services are provided in about 40 homeless shelters, day centers, transitional programs, and permanent supportive housing sites throughout King County. In 2006, about 6,075 homeless people had at least one encounter at a homeless-specific clinic site. Of this group, 55% were people of color.

Site	Patients 2006
Third Avenue Center (homeless clinic at YWCA Opportunity Place, Seattle; services provided by HMC-Pioneer Square Clinic)	786
Second Avenue Clinic (at Needle Exchange, Seattle); Services provided by HMC Pioneer Square Clinic	386
Country Doctor Teen Clinic (Seattle; Services provided through U.W. Adolescent Medicine)	317
Medical Respite (Recuperation) Program for Homeless Adults, Seattle (Services provided through HMC Pioneer Square Clinic)	317
45th Street Homeless Youth Clinic, Seattle (Puget Sound Neighborhood Health Centers)	903
All Other Homeless Outstation Clinic Sites (e.g, nurses in shelters) and clients of homeless health case management programs (sites throughout King County)	4,353
Unduplicated Total – Across All Sites/Clinics	**6,075**

We do not know the extent to which these 6,075 homeless people may have also been seen in other safety net health centers or hospitals.

Safety net health centers. Homeless people access care through primary medical and dental clinics of the health care safety net, and are included in the patient totals reported in Chapter 3. Clinics serving the highest percentages of homeless people are those located in downtown Seattle, corresponding with the locations of the highest concentrations of homeless people.

Hospitals. Some homeless people report that they rely on hospital emergency departments for care because they do not know about other sources of free or low-cost care in the community; they delayed seeking health care until a health problem grew worse; and/or they find the hours, wait times, or locations of the health centers inconvenient. Harborview Medical Center reviewed the 300 people who had the most frequent use of its emergency department in 2005 and who were served as outpatients and found that 40% were homeless.[51]

[51] King County Veterans and Human Services Levy Service Improvement Plan, September 2006, King County Department of Community and Human Services.

Gaps in Services and Access to Care
Health Care for the Homeless Network referral data indicates homeless people face challenges in accessing needed health care. Outstationed staff in homeless sites report the numbers and types of referrals they make, as well as the disposition, where known. Of those who had a referral made to **primary care**, only 44% were known to have actually received care. **Dental care** and **mental health services** had the lowest referral completion rates in 2006 (31% and 39% respectively), and similar patterns existed in 2004 and 2005. Homeless people who have Medicaid coverage also face unique challenges in keeping their coverage because they may miss recertification paperwork, for example.

D. People in Jail

Note: In general, limited information was available regarding health care access and coordination issues for people in city and county jails. Most of the information in this section is about the people in King County-operated jails.

Public Health-Seattle & King County provides year-round, 24/7 health care to individuals detained in the King County Correctional Facility located in downtown Seattle and in the Regional Justice Center located in Kent.

In 2006, Jail Health Services provided approximately 100,000 health care visits at its two locations.

Provider (MD or Nurse Practitioner) visits:	Approximately 20,000
Nurse visits:	Approximately 64,000
Mental health visits:	Approximately 12,000
Dental care visits:	Approximately 4,000

These numbers include visits provided throughout the jail facilities, both in the clinics and in the housing units. In addition, approximately 1,000 referrals were made to Harborview Medical Center for specialty services.

In the future, a fuller picture of patient demographics, health problems, and services provided should be possible due to a recently (2007-08) implemented electronic health record system.

In addition to providing health care services, Jail Health Services conducts release planning for high-need inmates to facilitate continuity of health care and linkage to other services following release, including access to health care coverage and other benefits where possible. Those targeted for release planning have the most complex health issues, such as those with brain injuries, cancer, diabetes, pregnancy, physical disabilities, chemical dependency, mental illness, HIV/AIDS, developmental disabilities, and other conditions. Care coordination and access to follow-up health services in the community remains a serious challenge for many who are released.

Selected Information on Jail Health Services Patients: A One-Month Snapshot
Late in 2005, PHSKC collected selected data on Jail Health Services patients for a one-month period. They included patients who were seen by a provider in either the Seattle or Kent jail.

Information was collected only on those who came to the jail clinic, and not those who may have received other types of health services outside the clinics.

During the study month, Jail Health Services provided care to 1,584 unduplicated individuals. Health insurance information was collected, revealing that 56% of the individuals had no health care coverage, 20% had Medicaid coverage, 7% had private coverage, 6% had other public coverage, 5% had Medicare and 6% had unknown status. Forty-three percent (43%) were people of color.

Alarmingly, half of the patients served by Jail Health Services during the study month were homeless. Mental health and substance abuse-related conditions accounted for 43% of the primary diagnoses among this group. Sixty-one percent of the homeless patients were uninsured.

Mental Health and Substance Abuse Conditions among the Jail Population
In another recent study, the King County Department of Community and Human Services reported the following mental illness and substance abuse prevalence among jail populations:[52]

- An estimated 15 percent of current King County jail inmates have mental illness, 80 percent have substance abuse problems, and five percent have co-occurring disorders (these comprising an average daily census of about 400).

- About half of the 1,113 youth using the King County Juvenile Detention Center during 2006 had symptoms of a mental disorder.

E. Low-income Women: Pregnancy and Family Planning Needs

In 2005, there were an estimated 401,948 women of childbearing age (15-44 years) in King County and a total of 22,010 births.[53]

Washington's Maternity Care Access Program provides comprehensive health care (medical, dental, vision) for the duration of the pregnancy and two months postpartum, and coverage then changes to cover family planning-only for an additional 10 months for women with incomes up to 185% FPL. Women (and men) with incomes below 200% of the Federal Poverty level also qualify for family planning-only services through the Take Charge program, or for subsidized medical care through the Basic Health Plan.

Almost 38% of 2005 King County births were to low-income Medicaid-covered women, a total of 8,364 births.[54] Around 30% of this group did not graduate from high school; only 47% were married. 64% of the births were to women of color.

[52] King County Department of Community and Human Services, "Prevalence of Mental Illness, Chemical Abuse and Homelessness: Individuals in jails, emergency services and mental health/chemical dependency treatment." May 2007.
[53] Washington State Department of Financial Management population estimates; *First Steps* Database, Washington State DSHS Research and Data Analysis Unit
[54] *First Steps* Database, Washington State DSHS Research and Data Analysis Unit

Births to immigrant and refugee women comprised 30% of all Medicaid-covered births in 2006. Of this population, 70% of births were to Hispanic women, and around 16% of births in this population were to women from countries of Asia. In 2004, the highest proportions of births to non-citizens were reported in neighborhoods surrounding the White Center Community Service Office (CSO) (16%), Rainier Valley CSO (15%), and South King County CSO (14%).[55]

All Medicaid-covered women also qualify for maternity support services (MSS). Of the 8,364 Medicaid-covered births in King County in 2005, 7,593 or 91% of women received maternity support services. Public Health-Seattle & King County health centers provided services to 69% of these women.[56] Maternity support services include case management by Public Health Nurse and Social Workers to provide coordination of high risk care, including prenatal, dental and pediatric care; information about growth, development and health; childbirth education; parenting information; coordination of treatment services, if needed; referrals to community resources and legal advocacy.

In addition, pregnancy outreach and infant mortality prevention programs provide community outreach, resources, advocacy and support to a diverse population of low-income pregnant and parenting women and their families. Women, Infant and Children's (WIC) nutrition program conducts outreach to pregnant women and a mobile WIC program provides nutrition education, referrals and checks for specific foods to pregnant and parenting women, infants and children.

In 2002, the most recent year for which data are available, 2% of women giving birth in King County received late or no prenatal care, including 236 live births.[57,58] The rate of late or no prenatal care was higher among Medicaid mothers (5%) than among non-Medicaid mothers (1%). Although the last decade has seen a significant decline in this rate, significant disparities persist. In 2002, American Indian/Alaska Native mothers were three times as likely, African Americans and Hispanic/Latinas twice as likely, and Asian/Pacific Islanders one and a half times more likely to have received late or no prenatal care compared to white mothers.

Over the last decade, high poverty neighborhoods consistently have had significantly higher rates (more than three times higher) of late or no prenatal care compared to low poverty neighborhoods. Medium poverty neighborhoods had a rate more than twice that of low poverty neighborhoods.[59]

In King County, the infant mortality rate has also declined fairly steadily since 1981. In 2004, the rate was 4.4 per 1,000 live births. The rate was 5.7 in 1995 and it was 9.9 in 1980. Despite this decline, significant disparities by race/ethnicity remain and may be getting larger. From 1995-2004, the infant mortality rate declined only for whites and African Americans.

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[55] CSO Profiles: Maternal Characteristics and Birth Outcomes for Community Service Offices, 1991-2004. Available at http://www1.dshs.wa.gov/pdf/ms/rda/research/9/86.pdf

[56] First Steps Database

[57] The Health of King County, 2006 (from birth certificate data)

[58] Birth certificate data for entry into prenatal care for 2003-2006 is available, but due to changes in birth certificate reporting and 20% missing data for this question, 2003-2006 figures cannot be compared to 2002 rates.

[59] PHSKC, Health of King County 2006, http://www.metrokc.gov/health/hokc/index.htm.

Women in Need of Contraceptive Services and Supplies

The most recent survey data available from 2002 reports an estimated 226,580 King County women age 13 to 44 were in need of contraceptive supplies and services.[60] In 2001, it was estimated 55% of all pregnancies in King County were unintended. The Healthy People 2010 goal for unintended pregnancy is 30%.

Health Services Utilization of Population of Women in Need
Women in need of publicly funded family planning in King County receive services in a variety of settings including Planned Parenthoods, Public Health–Seattle & King County family planning and primary care clinics, community health centers, other healthcare providers who serve Medicaid clients, and for youth, school-based and school-linked health centers.

Planned Parenthood sites provided family planning services to about 48,000 patients in King County in 2007.[61] 95% were female, 27% were people of color and 25% were uninsured. Public Health-Seattle & King County sites provided family planning services to 16,800 patients in 2007, of whom 92% were female, 61% of clients were people of color, 26% had limited English proficiency and 43% were uninsured.

Gaps in Service and Access for Women in Need
A variety of funding streams were developed specifically to support the provision of family planning services, including sexually transmitted disease (STD) screening and treatment, to low-income people, but funding levels have eroded over time. The result is a loose network of family planning providers in King County attempting to provide services to an increasingly uninsured and underinsured population of patients.

Historically, contraceptive services and STD screening and treatment have separate funding streams. Family planning providers use a best practice approach and deliver contraceptive and STD services together as a package. However, in the case of Family Planning Only and Take Charge patients, the STD services are not covered, and the STD-related lab and pharmaceutical costs become an unfunded burden.

F. Refugees

Refugee population
On average, about 1,500 new refugees annually have arrived in King County for the past decade. In 2007, the Refugee Health Screening Clinic of PHSKC screened 1,159 refugees and provided 1,031 refugees with Civil Surgeon services. All new refugees are required to complete a health screening with the local public health department within 90 days of arrival. After one year, new arrivals need to return to the clinic and show compliance with vaccination schedules and if applicable, medication regimes, in order to obtain documentation enabling them to obtain a Civil Surgeon letter, obtain permanent residency status and apply for a green card.

[60] Alan Guttmacher Institute survey on the number Women in Need of Contraceptive Services and Supplies, 2002.
[61] 2007 Demographic Report from Planned Parenthood of Western Washington, received via e-mail Jan 23, 2008.

The most represented countries for refugees are Somalia (402), Russian Federation (145), Ukraine (163), and Myanmar (159), followed by Iran (68), Ethiopia (71), Burundi (65), Eritrea (44) and Iraq (26). The greatest increases from the previous year were among Myanmar and Burundi refugees. 75% of the 2007 refugees were under 35 years old. Fifty-five percent were male, 45% female. 49% were Black, 36% White, 13% Asian/Pacific Islander and 2% other.

Refugee health needs

High blood pressure is the most commonly found health condition among refugee clients. Of 617 TB skin tests in the second half of 2007, 174 were positive (28%). Other recent trends in health issues among refugees include: small stature and possible malnutrition among Burundian children; fairly high rate of Hepatitis B among Somali and Burmese refugees.

In addition to Public Health-Seattle & King County, six community resettlement agencies in King County provide case management services to new refugees. Caseworkers at these agencies (often former refugees themselves) play a significant role in helping new arrivals to integrate into their new communities.

G. Veterans

Veterans in King County

In 2004, there were more than 147,000 civilian veterans living in King County.[62] Of this number, 40% are Vietnam veterans and 16% are Gulf War veterans. Around one third are 65 years or older; seven percent are women. It is estimated that as many as 30% of homeless persons in King County are veterans.[63]

There is general agreement among organizations now working with veterans that those returning from recent Middle East deployments tend to have lower incomes and less education than veterans of previous deployments. 2000 census tract data identified high concentrations of traditionally defined veterans in and around downtown Seattle, Renton, Auburn, Kenmore, Kent and Crossroads areas. Each of these communities had one or more census tracts with a veteran's population numbering 259-628.

Veterans' health care needs

The largest unmet health care need of veterans returning from the Iraq and Afghanistan conflicts is for mental health care.[64] Researchers have concluded "The strain of extended deployment, the stop-loss policy, stressful ground warfare, and uncertainty regarding discharge and leave has taken an especially high toll on soldiers."

Needs of families shift dramatically depending on where the service member is in the cycle of deployment:

[62] 2004 American Community Survey, U.S. Census Bureau
[63] 2004 One Night County of Homeless People
[64] Bilmes, L. "Soldiers Returning from Iraq and Afghanistan: The Long-term Costs of Providing Veterans Medical Care and Disability Benefits." Faculty Research Working Papers, Harvard University JFK School of Government RWP07-001, January 2007.

- In the pre-deployment stage, the service members' workload and stressors are tripled, and service members and families often experience discord, anger, and emotional detachment.[65]
- For families, deployment is exceedingly stressful, characterized by depression, anxiety, and sleep disturbance among other stress-related health problems.[66]
- Post-deployment presents the challenge of reintegration into family and civilian life, and service members' mental health symptoms often increase between the time of homecoming and three to four months post-deployment.[67] For families, dealing with the returning family member's severe mental and behavioral health conditions can be exceedingly stressful.
- Children's responses to deployment are varied and depend on age, as well as family and individual factors, but can include sadness, changes in eating habits, and decline in school performance.
- When mothers are the deployed parent, children also experience problems in peer relationships, emotional expression, learning, and physical health. Families with returning service members who are experiencing PTSD and combat-related stress may also be at increased risk for child abuse.[68]

During deployment, a substantial proportion of service members experience significant traumatic events, the impacts of which are magnified by the harsh living conditions of combat. Seventeen percent of soldiers serving in Iraq in 2006 suffered from acute stress, depression, or anxiety according to an Army survey, and rates were higher among soldiers who had at least one prior deployment (18%), a situation increasingly common in the current war.[69]

It is estimated that 36% of veterans treated thus far - an unprecedented proportion – have sought help and been diagnosed with behavioral health conditions including PTSD, acute depression, substance abuse and other conditions. There are no reliable data on VA waiting lists for medical and behavioral healthcare, but the VA reported in a recent editorial that the lists are so long as to effectively deny treatment to some veterans.[70]

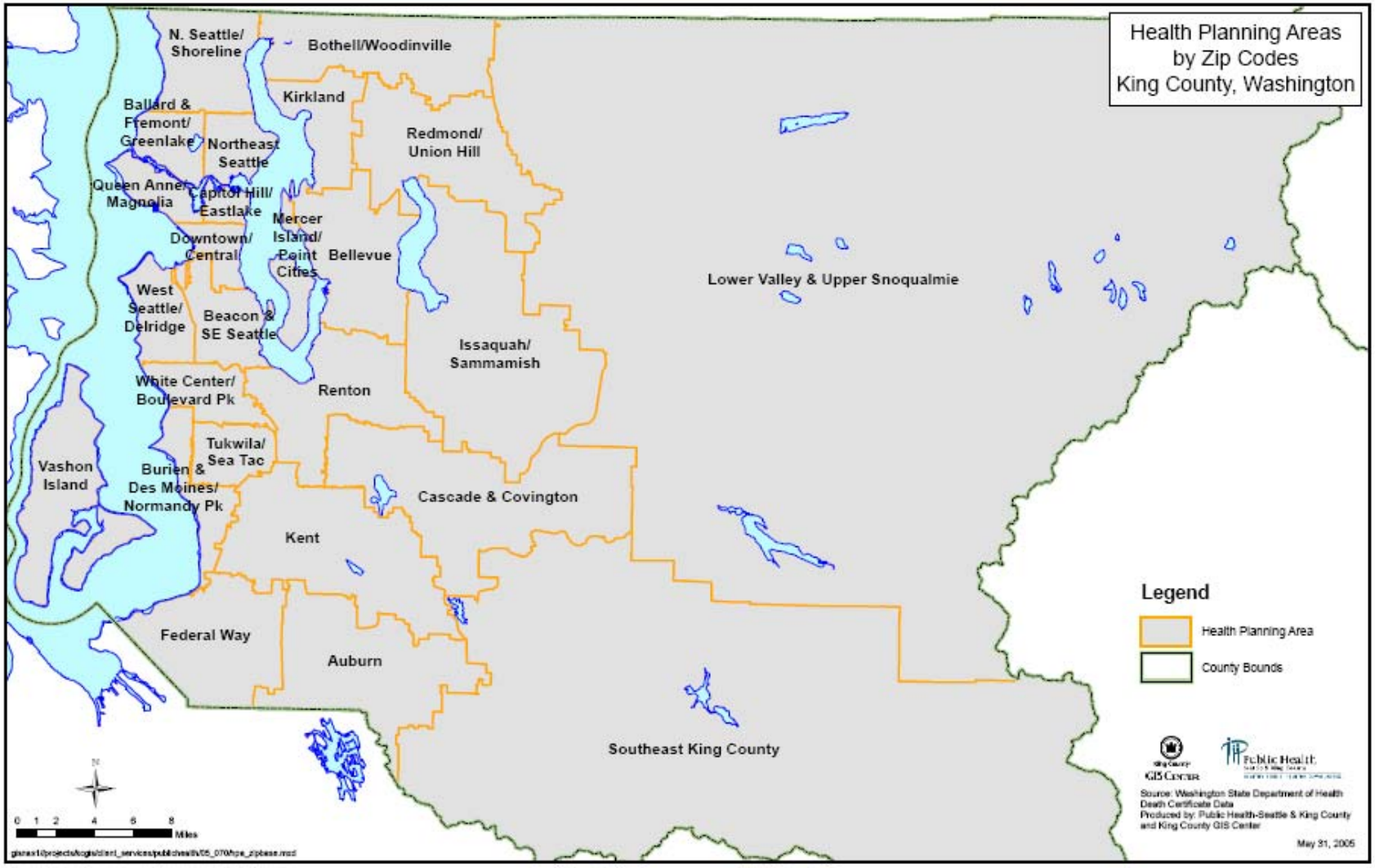
H. Summary

In summary, specific populations in King County, such as those with communicable diseases or chronic conditions, those who are low-income and pregnant, refugees and Veterans, face specific health needs that are being met in King County to greater and lesser degrees. The public health department has a historically defined role in providing and monitoring health care for those with communicable diseases. There are population-based health reasons to contain the spread of infections for the good of those infected and those who may be infected next. Similarly, the public health department has a long history in caring for low-income pregnant women, to the benefit of both the new mothers and their children. Public health solutions are needed to address

[65] "The Psychological needs of the U.S. Military Service Members and Their Families: A Preliminary Report." American Psychological Association Task Force on Military Deployment Services for Youth, Families, and Service Members, February 2007. Available at http://www.apa.org/releases/MilitaryDeploymentTaskForceReport.pdf
[66] Ibid.
[67] Ibid.
[68] Ibid.
[69] Ibid.
[70] Murphy, F. *Psychiatric News*, May 2006.

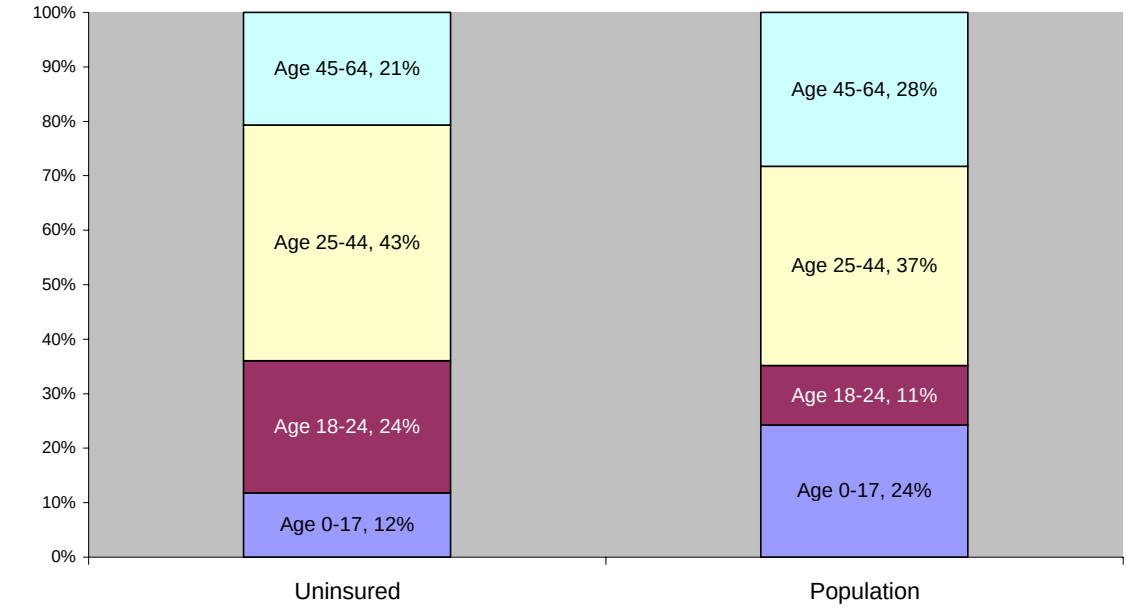
chronic conditions as well, as they become both more widespread and more of a disproportionate burden to low-income and other at-risk groups. The list of health conditions and populations highlighted in this section is not exhaustive of those served by the public health department and by other safety net providers in King County. This section is included in this report to provide a more complete picture from the perspectives of defined populations about their health care needs and how well these are being met.

Appendix A: Map of Health Planning Areas



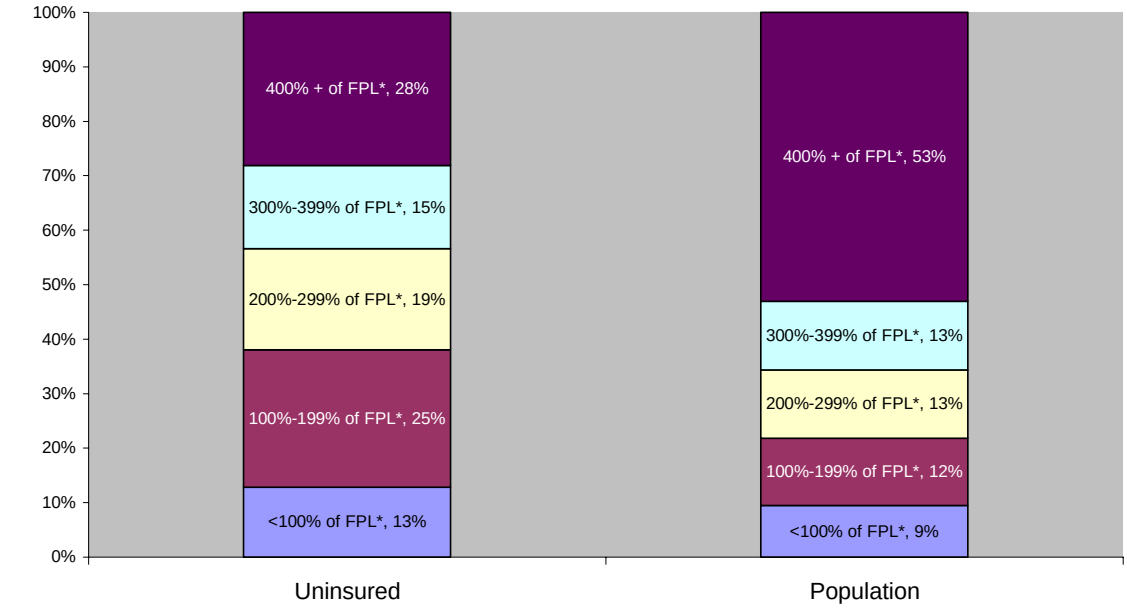
Appendix B: Profile of the Uninsured in King County Compared to the Population

Age (birth to 65)



Data Sources: OFM State Population Survey, Population Estimates

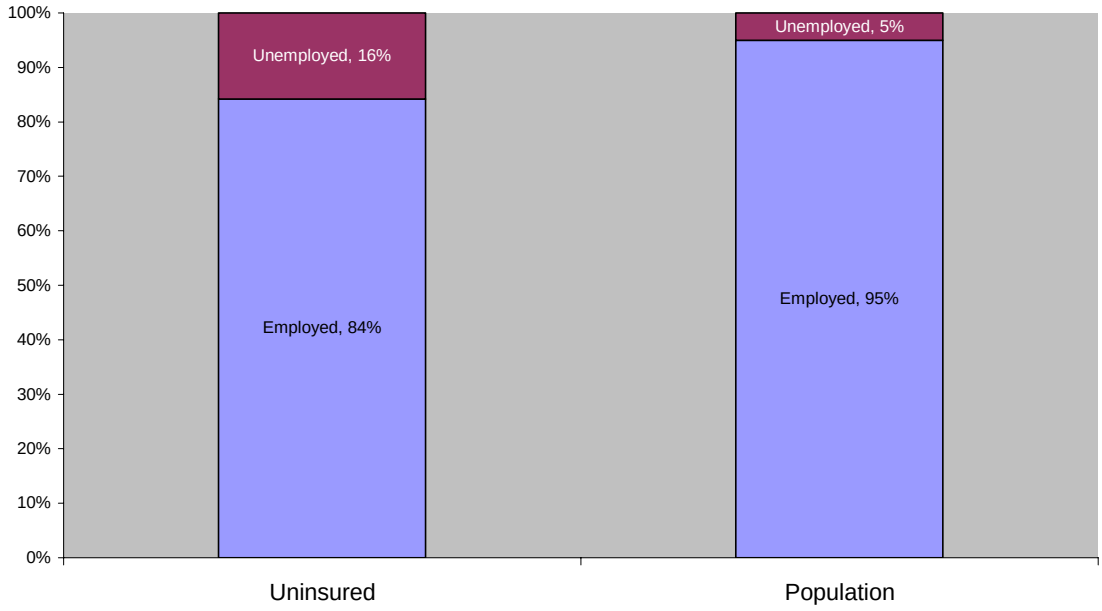
Poverty (all ages)



*FPL is Federal Poverty Level

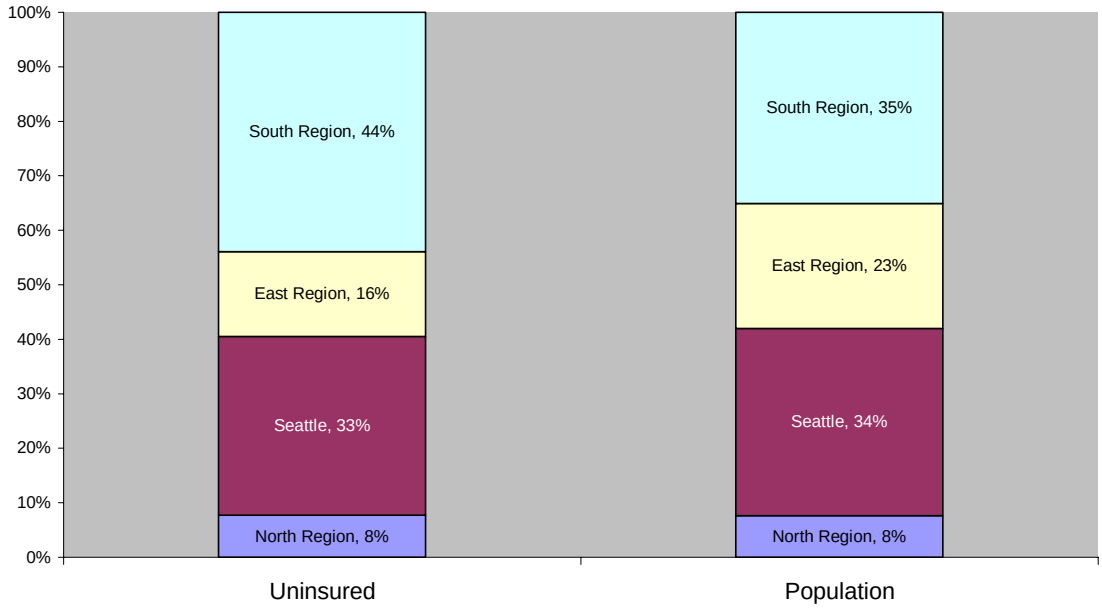
Data Sources: OFM State Population Survey, American Community Survey

Employment (if in labor force, 16 and older)



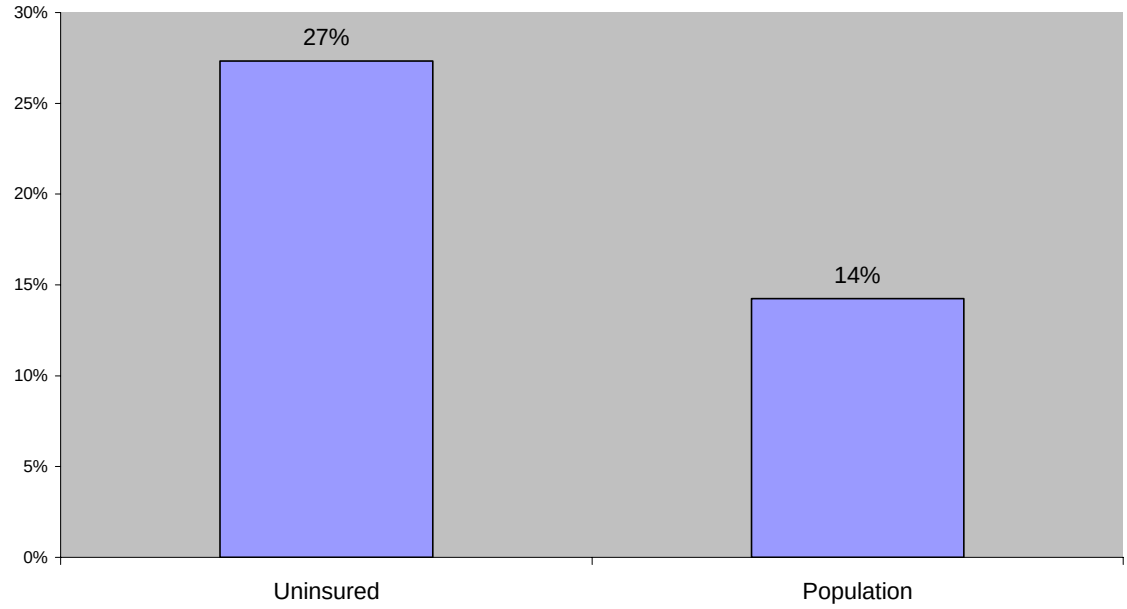
Data Sources: OFM State Population Survey, American Community Survey

Region (Age 18 to 64)



Data Sources: Behavioral Risk Factor Surveillance Survey, OFM Population Estimates

Health Status Fair or Poor (Age 18 to 64)

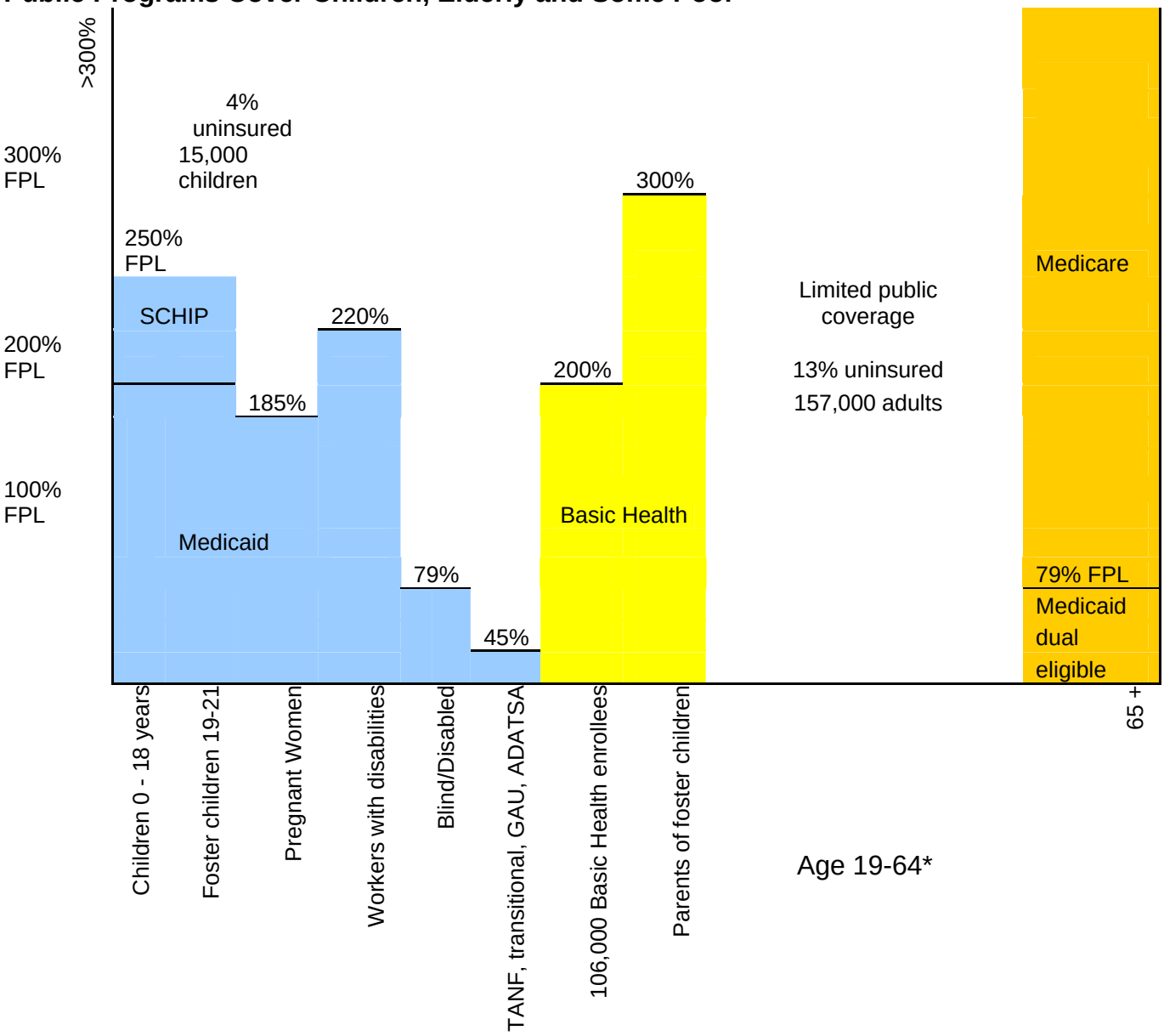


Data Sources: Behavioral Risk Factor Surveillance Survey

Data analysis and charts, Public Health – Seattle & King County
Assessment, Policy Development and Evaluation Unit

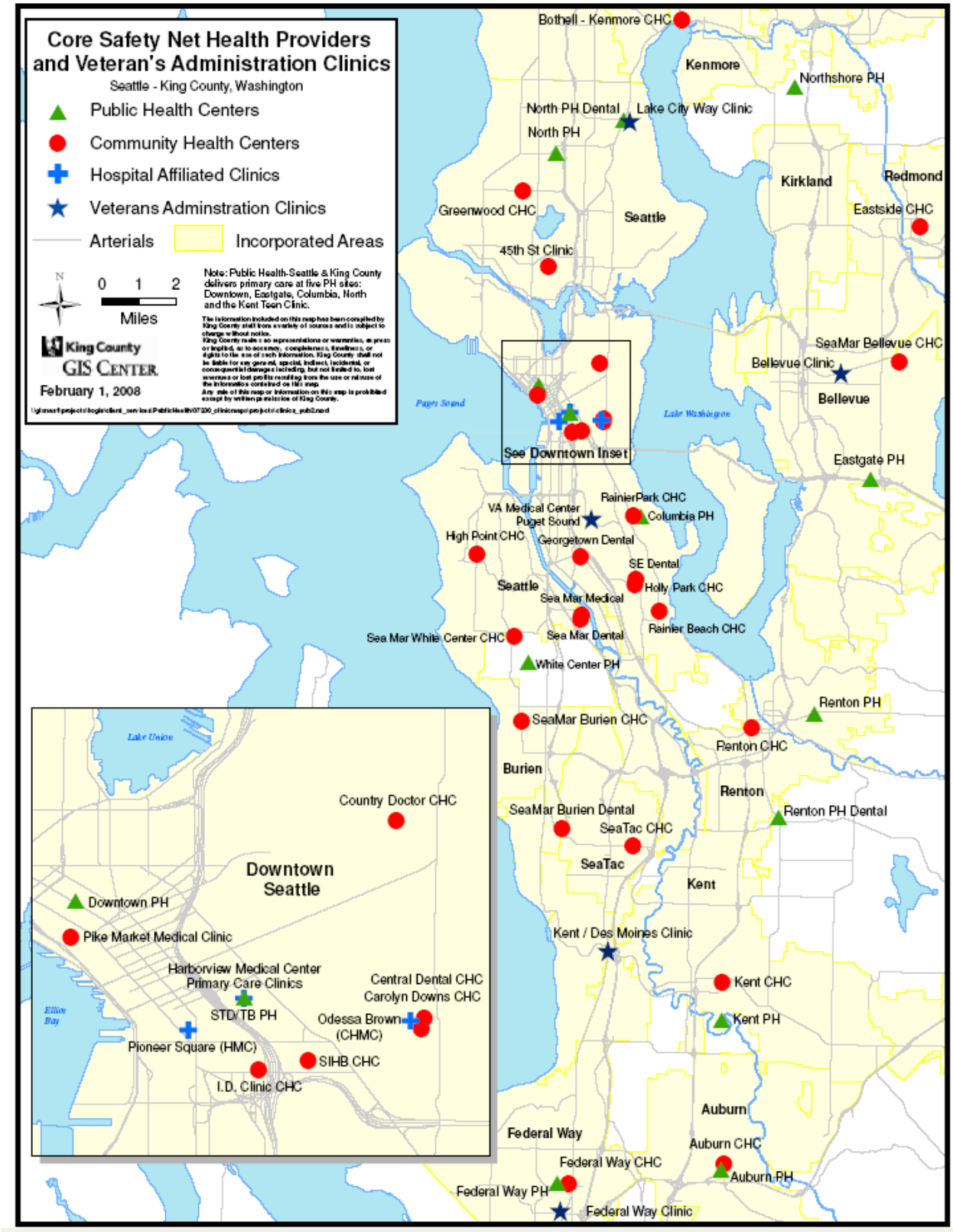
Appendix C: Medicaid Eligibility Chart

Public Programs Cover Children, Elderly and Some Poor



* There is some coverage for adults with breast or cervical cancer, and for TB, dialysis and family planning services.
Uninsured data from BRFSS.

Appendix D: Map of Core Health Safety Net Clinics



Appendix E: Core Safety Net Users by Agency

2006 Primary Medical Care Users		
	Total Users	Uninsured Users
Country Doctor CHC	15,726	9,340
Harborview Primary Care Clinics (incl. Pioneer Square)	23,236	6,151
International CHS	12,661	2,507
Puget Sound NHC	27,508	8,028
Sea Mar CHC	14,404	6,822
Seattle Indian Health Board	5,241	2,330
CHC of KC	32,520	13,273
Public Health Centers	16,787	7,524
Estimated Total (unduplicated within agencies, but not across agencies)	**148,083**	**55,975**

2006 Primary Medical Care Users, Plus PHSKC STD, Family Planning, Non-Travel Immunization, TB, WIC, and Maternity Support Services	
	Total users
Country Doctor CHC	15,726
HMC primary care clinics (incl. Pioneer Square)	23,236
International CHS	12,661
Puget Sound NHC	27,508
Sea Mar CHC	14,404
Seattle Indian Health Board	5,241
Community Health Centers of King County	32,520
PHSKC primary care	16,787
PHSKC STD clinic	9,882
PHSKC family planning	15,565
PHSKC immunizations	22,907
PHSKC TB	3,019
PHSKC WIC and maternity support services	57,618
PHSKC total	125,778
Estimated total (unduplicated within agencies*, but not across agencies)	**257,074**

*PHSKC primary care, STD, TB, FP and Immunization users are only counted once in this group of programs based on service category of last visit. Clients are counted once if seen in both WIC and MSS. Clients seen in WIC/MSS and in one of the program group above are counted once in WIC/MSS and once in the first group of programs.

Appendix E, continued

2006 Dental Users		
	Total users	Uninsured users
Community Health Centers of King County	13,048	4,422
International Community Health Centers	4,666	1,645
Odessa Brown Dental Clinic	5,053	398
Puget Sound Neighborhood Health Centers	15,763	7,225
SeaMar Community Health Centers	9,255	4,253
Seattle Indian Health Board	1,497	795
Public Health Seattle & King County	15,550	4,485
Estimated Total (users are unduplicated within agencies, but not across agencies)	**64,832**	**23,223**